```
*Vectors*; *Herpesvirus 4, Human--Genetics--GE
?ds

Set     Items   Description
S1          0   (REPLICATION (W) FACTOR) AND (EXTRACHROMOSOMAL (W) REPLICA-
             TION)
S2        126   (EXTRACHROMOSOMAL (W) REPLICATION)
S3        206   S2 OR (EPISOMAL (W) REPLICATION)
S4          0   S3 AND (SUPERTRANSFECTION (W) SYSTEM)
S5          3   S3 AND (SUPERTRANSFECTION)
S6          1   RD (unique items)
S7          0   S3 AND ((SECOND OR THIRD) (W) (VECTOR?))
S8          0   S3 AND (MULITPLE (W) VECTOR?)
S9         32   S3 AND (ES OR EC OR EG)
S10        30   RD (unique items)
S11         1   S10 AND ((POLYOMA (W) LARGE (W) T (W) ANTIGEN) OR (EBNA-1 -
             (W) ANTIGEN) OR (SV40 (W) LARGE (W) T (W) ANTIGEN) OR (PAPILL-
             OMA (W) VIRUS (W) REPLICATION (W) FACTOR?))
S12         3   S3 AND (REPLICATION (W) FACTOR?)
S13         1   RD (unique items)
S14         0   S3 AND (RECOMBINASE?)
S15        94   S3 AND (VECTOR?)
S16         0   S15 AND (RECOMBINASE?)
S17        43   RD S15 (unique items)
S18         4   S17 AND (ORI)
S19         3   S17 AND (CDNA (W) (LIBRARIES OR LIBRARY))
?s s17 and (signal (w) (peptide or polypeptide))
            43  S17
        441162  SIGNAL
        545813  PEPTIDE
        176880  POLYPEPTIDE
         18082  SIGNAL(W)(PEPTIDE OR POLYPEPTIDE)
     S20     0  S17 AND (SIGNAL (W) (PEPTIDE OR POLYPEPTIDE))
?s s17 and ((cell (w) surface (w) receptor) or (secreted (w) protein))
Processing
            43  S17
       5218550  CELL
        927812  SURFACE
       1304669  RECEPTOR
         11555  CELL(W)SURFACE(W)RECEPTOR
        114315  SECRETED
       2845218  PROTEIN
          4376  SECRETED(W)PROTEIN
     S21     0  S17 AND ((CELL (W) SURFACE (W) RECEPTOR) OR (SECRETED (W)
                PROTEIN))
?s au=smith, a
     S22     0  AU=SMITH, A
?s au=blackburn, catherine
     S23     0  AU=BLACKBURN, CATHERINE
?s au=smith, austin g.
     S24     0  AU=SMITH, AUSTIN G.
?ds

Set     Items   Description
S1          0   (REPLICATION (W) FACTOR) AND (EXTRACHROMOSOMAL (W) REPLICA-
             TION)
S2        126   (EXTRACHROMOSOMAL (W) REPLICATION)
S3        206   S2 OR (EPISOMAL (W) REPLICATION)
S4          0   S3 AND (SUPERTRANSFECTION (W) SYSTEM)
S5          3   S3 AND (SUPERTRANSFECTION)
S6          1   RD (unique items)
S7          0   S3 AND ((SECOND OR THIRD) (W) (VECTOR?))
S8          0   S3 AND (MULITPLE (W) VECTOR?)
S9         32   S3 AND (ES OR EC OR EG)
S10        30   RD (unique items)
S11         1   S10 AND ((POLYOMA (W) LARGE (W) T (W) ANTIGEN) OR (EBNA-1 -
```

```
            (W) ANTIGEN) OR (SV40 (W) LARGE (W) T (W) ANTIGEN) OR (PAPILL-
            OMA (W) VIRUS (W) REPLICATION (W) FACTOR?))
          3   S3 AND (REPLICATION (W) FACTOR?)
S12       1   RD (unique items)
S13       0   S3 AND (RECOMBINASE?)
S14      94   S3 AND (VECTOR?)
S15       0   S15 AND (RECOMBINASE?)
S16      43   RD S15 (unique items)
S17       4   S17 AND (ORI)
S18       3   S17 AND (CDNA (W) (LIBRARIES OR LIBRARY))
S19       0   S17 AND (SIGNAL (W) (PEPTIDE OR POLYPEPTIDE))
S20       0   S17 AND ((CELL (W) SURFACE (W) RECEPTOR) OR (SECRETED (W) -
S21          PROTEIN))
          0   AU=SMITH, A
S22       0   AU=BLACKBURN, CATHERINE
S23       0   AU=SMITH, AUSTIN G.
S24
?logoff
       24dec00 16:22:17 User259876 Session D167.2
            $5.91    1.848 DialUnits File155
              $1.80  9 Type(s) in Format  3
            $1.80  9 Types
       $7.71  Estimated cost File155
            $7.38    1.318 DialUnits File5
       $7.38  Estimated cost File5
           $12.97    1.525 DialUnits File73
              $2.35  1 Type(s) in Format  3
            $2.35  1 Types
       $15.32  Estimated cost File73
            OneSearch, 3 files,  4.692 DialUnits FileOS
        $1.65  TYMNET
       $32.06  Estimated cost this search
       $32.48  Estimated total session cost    4.808 DialUnits


   ### Status: Signed Off. (33 minutes)
```

```
Set     Items   Description
S1       2362    EMBRYONIC (W) STEM (W) CELL) OR (EMBRYONIC (W) CARCINOMA -
             (W) CELL) OR (EMBRYONIC (W) GONADAL (W) CELL)
S2          0   S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) (VECTOR OR PLAS-
            MID))
S3          0   S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) REPLICATION)
S4          0   S1 AND (EPISOMAL (W) (VECTOR OR PLASMID))
S5        359   (EPISOMAL (W) (VECTOR OR PLASMID))
S6         87   S5 AND (ES OR EG OR EC)
S7          5   S6 AND ((T (W) ANTIGEN) OR EBNA-1 OR PAPILLOMA)
S8          3   RD (unique items)
S9        232   ((EPISOMAL OR EXTRACHROMOSOMAL) (W) REPLICATION)
S10        43   S9 AND ((T (W) ANTIGEN) OR EBNA-1 OR PAPILLOMA)
S11        25   RD (unique items)
S12         0   S11 AND ((SECOND OR THIRD) (W  (VECTOR OR PLASMID))
S13         0   S11 AND (ES)
S14         0   S13 AND (SCREENING (W) LIBRARY)
?s s11 and (screening (w) library)
            25  S11
        446444  SCREENING
        112317  LIBRARY
            38  SCREENING(W)LIBRARY
     S15     0  S11 AND (SCREENING (W) LIBRARY)
?ds

Set     Items   Description
S1       2362    (EMBRYONIC (W) STEM (W) CELL) OR (EMBRYONIC (W) CARCINOMA -
             (W) CELL) OR (EMBRYONIC (W) GONADAL (W) CELL)
S2          0   S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) (VECTOR OR PLAS-
            MID))
S3          0   S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) REPLICATION)
S4          0   S1 AND (EPISOMAL (W) (VECTOR OR PLASMID))
S5        359   (EPISOMAL (W) (VECTOR OR PLASMID))
S6         87   S5 AND (ES OR EG OR EC)
S7          5   S6 AND ((T (W) ANTIGEN) OR EBNA-1 OR PAPILLOMA)
S8          3   RD (unique items)
S9        232   ((EPISOMAL OR EXTRACHROMOSOMAL) (W) REPLICATION)
S10        43   S9 AND ((T (W) ANTIGEN) OR EBNA-1 OR PAPILLOMA)
S11        25   RD (unique items)
S12         0   S11 AND ((SECOND OR THIRD) (W  (VECTOR OR PLASMID))
S13         0   S11 AND (ES)
S14         0   S13 AND (SCREENING (W) LIBRARY)
S15         0   S11 AND (SCREENING (W) LIBRARY)
?logoff
       30may02 16:33:20 User259876 Session D349.2
            $4.64    1.449 DialUnits File155
               $2.73  13 Type(s) in Format  3
            $2.73  13 Types
     $7.37  Estimated cost File155
            $5.99    1.069 DialUnits File5
              $10.50  6 Type(s) in Format  3
           $10.50  6 Types
    $16.49  Estimated cost File5
           $17.04    1.893 DialUnits File73
              $22.50  9 Type(s) in Format  3
           $22.50  9 Types
    $39.54  Estimated cost File73
            OneSearch, 3 files,  4.412 DialUnits FileOS
     $4.76  TELNET
    $68.16  Estimated cost this search
    $68.55  Estimated total session cost   4.503 DialUnits


### Status: Signed Off. (23 minutes)
```

Status: Path 1 of [Dialog Information Services via Modem]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106[illegible]00009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSS?
Status: Signing onto Dialog
 ****
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 02.05.06D

Last logoff: 28may02 11:49:53
Logon file001 30may02 16:11:15
           *** ANNOUNCEMENT ***
                    ***
--Important Notice for Japanese KMKNET Users
KMKNET will be terminated on 5/31/02. Please
switch to DLGNET. Please refer to the G-Search
home page at http://www.g-search.or.jp
for more information.
                    ***
--SourceOne patents are now delivered to your
email inbox as PDF replacing TIFF delivery.
See HELP SOURCE1 for more information.
                    ***
--Important news for public and academic
libraries. See HELP LIBRARY for more information.
                    ***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
For information about the access to file 43 please see Help News43.
***
NEW FILES RELEASED
***AGROProjects (File 235)
***TRADEMARKSCAN-Japan (File 669)
                    ***
UPDATING RESUMED
***Delphes European Business (File 481)
                    ***
RELOADED
***CLAIMS/US PATENTS (Files 340, 341, 942)
***Kompass Western Europe (590)
***D&B - Dun's Market Identifiers (516)

REMOVED
***Baton Rouge Advocate (File 382)
***Washington Post (File 146)
***Books in Print (File 470)
***Court Filings (File 793)
***Microcomputer Software Guide Online (File 278)
***Publishers, Distributors & Wholesalers of the U.S. (File 450)
***State Tax Today (File 791)
***Tax Notes Today (File 790)
***Worldwide Tax Daily (File 792)
New document supplier
IMED has been changed to INFOTRIE (see HELP OINFOTRI)

```
>>>Get immediate news with Dialog's First Release
   news service.  First Release updates major newswire
   databases within 15 minutes of transmission over the
   wire.  First Release provides full Dialog searchability
   and full-text features.  To search First Release files in
   OneSearch simply BEGIN FIRST for coverage from Dialog's
   broad spectrum of news wires.

     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
KWIC is set to 50.
HILIGHT set on as '*'

File   1:ERIC  1966-2002/May 10
       (c) format only 2002 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?b 155, 5, 73
       30may02 16:11:36 User259876 Session D349.1
            $0.32    0.092 DialUnits File1
     $0.32  Estimated cost File1
     $0.07  TELNET
     $0.39  Estimated cost this search
     $0.39  Estimated total session cost   0.092 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2002/May W3
*File 155: Daily alerts are now available. This file has
been reloaded. Accession numbers have changed.
  File   5:Biosis Previews(R)  1969-2002/May W4
         (c) 2002 BIOSIS
  File  73:EMBASE  1974-2002/May W4
         (c) 2002 Elsevier Science B.V.
*File  73: For information about Explode feature please
see Help News73.

      Set  Items  Description
      ---  -----  -----------
?s (embryonic (w) stem (w) cell) or (embryonic (w) carcinoma (w) cell) or (embryonic (w
) gonadal (w) cell)
Processing
          197511  EMBRYONIC
          283856  STEM
         5747765  CELL
            2270  EMBRYONIC(W)STEM(W)CELL
          197511  EMBRYONIC
          835616  CARCINOMA
         5747765  CELL
              92  EMBRYONIC(W)CARCINOMA(W)CELL
          197511  EMBRYONIC
           45072  GONADAL
         5747765  CELL
                0  EMBRYONIC(W)GONADAL(W)CELL
      S1    2362  (EMBRYONIC (W) STEM (W) CELL) OR (EMBRYONIC (W) CARCINOMA
                  (W) CELL) OR (EMBRYONIC (W) GONADAL (W) CELL)
?s s1 and ((episomal or extrachromosomal) (w) (vector or plasmid))
            2362  S1
            3199  EPISOMAL
            8315  EXTRACHROMOSOMAL
          187075  VECTOR
          165419  PLASMID
```

```
            522  (EPISOMAL OR EXTRACHROMOSOMAL)(W)(VECTOR OR PLASMID)
      S2      0  S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) (VECTOR OR
                 PLASMID))
?s s1 and (episomal or extrachromosomal) (w) replication)
>>>Unmatched parentheses
?(
>>>Nothing to KEEP. Set not created.
? s1 and (episomal or extrachromosomal) (w) replication)
>>>Unmatched parentheses
?>>>Unmatched parentheses
>>>Unrecognizable Command
?s s1 and ((episomal or extrachromosomal) (w) replication)
          2362  S1
          3199  EPISOMAL
          9315  EXTRACHROMOSOMAL
        232233  REPLICATION
           232  (EPISOMAL OR EXTRACHROMOSOMAL)(W)REPLICATION
      S3      0  S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) REPLICATION)
?s s1 and (episomal (w) (vector or plasmid))
          2362  S1
          3199  EPISOMAL
        187075  VECTOR
        165419  PLASMID
           359  EPISOMAL(W)(VECTOR OR PLASMID)
      S4      0  S1 AND (EPISOMAL (W) (VECTOR OR PLASMID))
?s (episomal (w) (vector or plasmid))
          3199  EPISOMAL
        187075  VECTOR
        165419  PLASMID
      S5    359  (EPISOMAL (W) (VECTOR OR PLASMID))
?s s5 and (ES or EG or EC)
           359  S5
         30565  ES
         17794  EG
       2676558  EC
      S6    87  S5 AND (ES OR EG OR EC)
?s s6 and ((T (w) antigen) or EBNA-1 or papilloma)
            87  S6
       4029641  T
        918283  ANTIGEN
         16327  T(W)ANTIGEN
            43  EBNA-1
         27459  PAPILLOMA
      S7     5  S6 AND ((T (W) ANTIGEN) OR EBNA-1 OR PAPILLOMA)
?rd
...completed examining records
      S8     3  RD (unique items)
?t s8/3,k/all

 8/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09113181   97025358   PMID: 8871548
  A polyoma-based *episomal* *vector* efficiently expresses exogenous genes
in mouse embryonic stem cells.
  Camenisch G; Gruber M; Donoho G; Van Sloun P; Wenger R H; Gassmann M
  Institute of Physiology, University of Zurich, Switzerland.
  Nucleic acids research (ENGLAND)  Oct 1 1996,  24  (19)  p3707-13,
ISSN 0305-1048   Journal Code: 0411011
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: Completed

  A polyoma-based *episomal* *vector* efficiently expresses exogenous genes
in mouse embryonic stem cells.
```

We describe the ability of novel episomally maintained vectors to efficiently promote gene expression in embryonic stem (*ES*) cells as well as in established mouse cell lines. Extrachromosomal maintenance of our vectors is based on the presence of polyoma virus DNA sequences, including the origin of replication harboring a mutant enhancer (PyF101), and a modified version of the polyoma early region (LT20) encoding the large *T* *antigen* only. Reporter gene expression from such extrachromosomally replicating vectors was approximately 10-fold higher than expression from replication-incompetent control plasmids. After transfection of different *ES* cell lines, the polyoma virus-derived plasmid variant pMGD20neo (7.2 kb) was maintained episomally in 16% of the G418-resistant clones. No chromosomal integration of pMGD20neo vector DNA was detected in *ES* cells that contained *episomal* *vector* DNA even after long term passage. The vector's replication ability was not altered after insertion of up to 10 kb hprt gene fragments. Besides undifferentiated *ES* cells, the polyoma-based vectors were also maintained extrachromosomally in differentiating *ES* cells and embryoid bodies as well as in established mouse cell lines.

8/3,K/2 (Item 1 from file: 73)

06220852 EMBASE No: 1995250635

Preparation of a murine cell line which stably expresses human T lymphotropic virus type I (HTLV-I) env genome products

Joh T.; Fujita M.; Tanaka Y.; Shiku H.
Department of Oncology, Nagasaki University, School of Medicine, 1-12-4 Sakamoto,Nagasaki 852 Japan

Gene (GENE) (Netherlands) 1995, 161/2 (227-230)
CODEN: GENED ISSN: 0378-1119
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...cell line NS-1, which stably expressed the human T lymphotropic virus type I (HTLV-I) env gene. The plasmid BCMGEnv was constructed from the *episomal*- *vector* BCMGSNeo, which was primarily derived from bovine *papilloma* virus. Transfected env expression was detected by Northern blotting, as well as by flow cytometry using envelope protein-specific monoclonal antibodies (mAb). Expression was detectable...
DRUG DESCRIPTORS:
*human t cell leukemia virus antigen--endogenous compound--*ec*

8/3,K/3 (Item 2 from file: 73)

05818936 EMBASE No: 1994226742

A new runaway type *episomal* *vector* for mammalian cells based on a temperature-sensitive simian virus 40 and inducible erythropoietin production

Kirinaka H.; Kamihira M.; Iijima S.; Kobayashi T.
Department of Biotechnology, School of Engineering, Nagoya University, Furo-cho, Chikusa-ku,Nagoya 464-01 Japan

Applied Microbiology and Biotechnology (APPL. MICROBIOL. BIOTECHNOL.) (Germany) 1994, 41/5 (591-596)
CODEN: AMBID ISSN: 0175-7598
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

A new runaway type *episomal* *vector* for mammalian cells based on a temperature-sensitive simian virus 40 and inducible erythropoietin production

A runaway vector for mammalian cells was constructed from the simian

virus 40 (SV40) genome with a temperature-sensitive mutation of the large *T* *antigen* and bacterial neo(r) gene. Replication of this plasmid was repressed above 39degreeC and vigorous DNA propagation was observed below 33degreeC in simian CV-1...
DRUG DESCRIPTORS:
*erythropoietin--endogenous compound--*ec*; *erythropoietin--drug development--dv; *virus large *t* *antigen*--endogenous compound--*ec*
?ds

```
Set     Items   Description
S1       2362   (EMBRYONIC (W) STEM (W) CELL) OR (EMBRYONIC (W) CARCINOMA -
            (W) CELL) OR (EMBRYONIC (W) GONADAL (W) CELL)
S2          0   S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) (VECTOR OR PLAS-
             MID))
S3          0   S1 AND ((EPISOMAL OR EXTRACHROMOSOMAL) (W) REPLICATION)
S4          0   S1 AND (EPISOMAL (W) (VECTOR OR PLASMID))
S5        359   (EPISOMAL (W) (VECTOR OR PLASMID))
S6         87   S5 AND (ES OR EG OR EC)
S7          5   S6 AND ((T (W) ANTIGEN) OR EBNA-1 OR PAPILLOMA)
S8          3   RD (unique items)
?s ((episomal or extrachromosomal) (w) replication)
           3199  EPISOMAL
           8315  EXTRACHROMOSOMAL
         232233  REPLICATION
      S9     232  ((EPISOMAL OR EXTRACHROMOSOMAL) (W) REPLICATION)
?s s9 and ((T (w) antigen) or EBNA-1 or papilloma)
            232  S9
        4029641  T
         918283  ANTIGEN
          16327  T(W)ANTIGEN
             43  EBNA-1
          27459  PAPILLOMA
     S10     43  S9 AND ((T (W) ANTIGEN) OR EBNA-1 OR PAPILLOMA)
?rd
...completed examining records
     S11     25  RD (unique items)
?s s11 and ((second or third) (w) (vector or plasmid))
            25  S11
        885030  SECOND
        434920  THIRD
        187075  VECTOR
        165419  PLASMID
           647  (SECOND OR THIRD)(W)(VECTOR OR PLASMID)
     S12     0  S11 AND ((SECOND OR THIRD) (W) (VECTOR OR PLASMID))
?s s11 and (ES)
            25  S11
         30565  ES
     S13     0  S11 AND (ES)
?s s13 and (screening (w) library)
             0  S13
        446444  SCREENING
        112317  LIBRARY
            38  SCREENING(W)LIBRARY
     S14     0  S13 AND (SCREENING (W) LIBRARY)
?t s11/3,k/all
```

11/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09436463 97345683 PMID: 9202175
Production and characterization of a mutant cell line defective in aminophospholipid translocase.
Zhao J; Sims P J; Wiedmer T
Blood Research Institute, The Blood Center of Southeastern Wisconsin, Milwaukee 53201-2178, USA.
Biochimica et biophysica acta (NETHERLANDS) Jun 5 1997, 1357 (1)

p57-64, ISSN 0006-3002 Journal Code: 0217513
Contract/Grant No.: HL36946; HL; NHLBI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... a decrease in cellular ATP levels. Mutant M2711 exhibited a growth pattern indistinguishable from that of wild-type SV-T2 cells, and SV-40 large *T* *antigen*, which is needed for efficient *episomal* *replication* of plasmids containing the SV40 origin of replication, was unchanged. Finally, transfection of M2711 with cDNAs for marker membrane proteins consistently resulted in the same...

11/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08752085 96091344 PMID: 8529099
Expression cloning of cDNAs that render cancer cells resistant to Pseudomonas and diphtheria toxin and immunotoxins.
Brinkmann U; Brinkmann E; Pastan I
Laboratory of Molecular Biology, Division of Cancer Biology, Diagnosis, and Centers, Bethesda, Maryland, USA.
Molecular medicine (Cambridge, Mass.) (UNITED STATES) Jan 1995, 1 (2) p206-16, ISSN 1076-1551 Journal Code: 9501023
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... To investigate how cells can become resistant to PE-derived immunotoxins, we constructed an immunotoxin-sensitive MCF-7 breast cancer cell line that contains SV40 *T* *antigen* and allows *episomal* *replication* of SV40 origin containing plasmids. We transfected a pCDM8/HeLa cDNA expression library into these cells, thereby causing over-expression of the plasmid-encoded genes...

11/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08713226 96078382 PMID: 7580118
Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region.
Kobayashi M; Yamauchi Y; Yamaguchi K; Tanaka A
Morinaga Milk Branch, Research Institute of Innovative Technology for the Earth, Kanagawa, Japan.
Antisense research and development (UNITED STATES) Summer 1995, 5 (2) p141-8, ISSN 1050-5261 Journal Code: 9110698
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region.
We have developed a transient expression assay for selection of effective antisense RNAs using *episomal* *replication* of plasmids in COS-7 cells, an African green monkey kidney-derived cell line expressing SV40 large *T* *antigen* . The transient expression assay was enabled by a liposome-mediated DNA transfection method, by which about 70% of the cells

were reproducibly transfected with exogenous...

11/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08238368 94378516 PMID: 8091670
The bovine *papilloma* virus E1 protein has ATPase activity essential to viral DNA replication and efficient transformation in cells.
MacPherson P; Thorner L; Parker L M; Botchan M
Department of Molecular and Cell Biology, University of California, Berkeley 94720.
Virology (UNITED STATES) Oct 1994, 204 (1) p403-8, ISSN 0042-6822 Journal Code: 0110674
Contract/Grant No.: CA42414; CA; NCI; ES01896; ES; NIEHS
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The bovine *papilloma* virus E1 protein has ATPase activity essential to viral DNA replication and efficient transformation in cells.
The bovine *papilloma* virus (BPV) E1 protein essential to viral DNA replication has recently been shown to associate via direct protein-DNA interactions with the viral origin of...

... ATPase activity. Mutations placed throughout the nucleotide binding consensus element abolish the ATPase activity of E1 and render BPV genomes harboring such mutations defective for *episomal* *replication* and impaired for oncogenic transformation.

11/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07373263 92307747 PMID: 1377172
A new approach to the cloning of genes encoding T-cell epitopes.
Scott D M; Dyson P J; Simpson E
Transplantation Biology Section, Clinical Research Centre, Harrow, Middlesex, UK.
Immunogenetics (UNITED STATES) 1992, 36 (2) p86-94, ISSN 0093-7711 Journal Code: 0420404
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... and subsequent recovery of the integrated DNA by cosmid rescue. We have modified this technique and have stably transfected P1.HTR cell lines with polyoma *T* *antigen*, which allows *episomal* *replication* of the shuttle vector, pCDM8. Using pCDM8-CAT constructs, we have determined the frequency of transfection and plasmid copies taken up per cell under optimal...

11/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06912698 91220690 PMID: 1850915
The domain of Epstein-Barr virus nuclear antigen 1 essential for binding to oriP region has a sequence fitted for the hypothetical basic-helix-loop-helix structure.
Inoue N; Harada S; Honma T; Kitamura T; Yanagi K
Department of Virology and Rickettsiology, National Institute of Health, Tokyo, Japan.
Virology (UNITED STATES) May 1991, 182 (1) p84-93, ISSN 0042-6822

Journal Code: 0110674
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The domain of Epstein-Barr virus nuclear antigen 1 (EBNA-1) which is essential for binding to a region containing oriP, an *episomal* *replication* origin of EBV DNA, was analyzed by DNA binding assay with beta-galactosidase-EBNA-1 fusion proteins. It was revealed that a 159-amino acid...
Gene Symbol: *EBNA-1*; MyoD; TFE3; oriP

11/3,K/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06745530 91058637 PMID: 2173930
Polyoma DNA replication dependent upon growth condition of SEWA sarcoma cells.
Robinson R; Ronai Z
Molecular Carcinogenesis Program, American Health Foundation, Valhalla, New York 10595.
Molecular carcinogenesis (UNITED STATES) 1990, 3 (5) p268-72, ISSN 0899-1987 Journal Code: 8811105
Contract/Grant No.: CA17613; CA; NCI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Extrachromosomal *replication* of viral DNA sequences has been observed in transformed as well as in normal cells following "stress"-inducing treatments. To explore the effect of growth...

... that were adapted to grow in culture, only when the cultured cells are stimulated with UV irradiation. Immunoprecipitation of T antigens enabled detection of large *T* *antigen* only in the ascites-derived cells. The mechanisms that may regulate this phenomenon and the possible role large T may play in different growth conditions...

11/3,K/8 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05230345 86301878 PMID: 3017813
An inducible eukaryotic host-vector expression system: amplification of genes under the control of the polyoma late promoter in a cell line producing a thermolabile large *T* *antigen*.
Kern F G; Basilico C
Gene (NETHERLANDS) 1986, 43 (3) p237-45, ISSN 0378-1119 Journal Code: 7706761
Contract/Grant No.: 5T32 CA09161; CA; NCI; CA11893; CA; NCI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... **inducible eukaryotic host-vector expression system: amplification of genes under the control of the polyoma late promoter in a cell line producing a thermolabile large *T* *antigen*.**
We have taken advantage of the inherent instability of integrated polyoma (Py) DNA sequences in the presence of a functional viral large *T* *antigen* (LT) to develop a eukaryotic host-vector system where copy number is controlled by temperature. A mouse cell line WOP32-4, that constitutively expresses a...

... resident Py sequences present in the WOP32-4 cells cannot excise due to an ori deletion. However, excision of the transfected plasmid molecules and subsequent *extrachromosomal* *replication* occur at high rates leading in some cases to the production of 1000-2000 copies per cell (average) of the plasmid. Proportional increases in either...

11/3,K/9 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04752106 85137496 PMID: 2983188
Characterization of a retrovirus shuttle vector capable of either proviral integration or *extrachromosomal* *replication* in mouse cells.
Berger S A; Bernstein A
Molecular and cellular biology (UNITED STATES) Feb 1985, 5 (2) p305-12, ISSN 0270-7306 Journal Code: 8109087
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Characterization of a retrovirus shuttle vector capable of either proviral integration or *extrachromosomal* *replication* in mouse cells.
...been included in this vector. Infection of normal rodent cells results in single-copy proviral integration, whereas infection of mouse (MOP) cells expressing polyoma large *T* *antigen* results in *extrachromosomal* *replication* of the DNA form of the virus. The copy number of the extrachromosomal circles in MOP cells varies from 0 to 100 copies per cell ...

11/3,K/10 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04660367 85036294 PMID: 6092918
BK virus-plasmid expression vector that persists episomally in human cells and shuttles into Escherichia coli.
Milanesi G; Barbanti-Brodano G; Negrini M; Lee D; Corallini A; Caputo A; Grossi M P; Ricciardi R P
Molecular and cellular biology (UNITED STATES) Aug 1984, 4 (8) p1551-60, ISSN 0270-7306 Journal Code: 8109087
Contract/Grant No.: CA-29797; CA; NCI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...the input vector. Removal of selective pressure had no apparent effect upon the episomal status of pBK TK-1 molecules in TK+-transformed cells. BKV *T* *antigen* may play a role in *episomal* *replication* of pBK TK-1 since this viral protein was expressed in TK+ transformants and since a plasmid that contained only the BKV origin of replication was highly amplified in BKV-transformed human cells that synthesize BKV *T* *antigen*.

11/3,K/11 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04645325 85027172 PMID: 6092063
Origin of replication in episomal bovine *papilloma* virus type 1 DNA isolated from transformed cells.
Waldeck W; Rosl F; Zentgraf H
EMBO journal (ENGLAND) Sep 1984, 3 (9) p2173-8, ISSN 0261-4189 Journal Code: 8208664
Document type: Journal Article
Languages: ENGLISH

Main Citation Owner: NLM
Record type: Completed

Origin of replication in episomal bovine *papilloma* virus type 1 DNA isolated from transformed cells.
The origin of replication of bovine *papilloma* virus type 1 (BPV-1) has been determined by isolating replicative intermediates (RI) of BPV-transformed hamster embryo fibroblasts (HEF-BPV). These RI were treated ...

... at 6940 +/- 5* bp in the physical map. In a second set of experiments BPV-1 DNA fragments cloned in pBR322 were tested for transient *episomal* *replication*. Transfected cells were harvested after increasing periods of time and screened for replication with isoschizomeric restriction enzymes to differentiate between input and replicated DNA. The...

11/3,K/12 (Item 12 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04423952 84106844 PMID: 6319020
Characterization of the bovine *papilloma* virus plasmid maintenance sequences.
Lusky M; Botchan M R
Cell (UNITED STATES) Feb 1984, 36 (2) p391-401, ISSN 0092-8674
Journal Code: 0413066
Contract/Grant No.: CA 30490; CA; NCI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Characterization of the bovine *papilloma* virus plasmid maintenance sequences.
Bovine *Papilloma* Virus (BPV-1) establishes itself as a multicopy nuclear plasmid in somatic mammalian cells in culture. We report here that two discontinuous regions within the viral genome can independently support *extrachromosomal* *replication* of the Tn5 neomycinr gene in cells that provide viral factors in trans. The viral plasmid maintenance sequences (PMS) act in cis and will integrate...

11/3,K/13 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11217404 BIOSIS NO.: 199799838549
Exploitation of human origins of replication (ORIs) for *extrachromosomal* *replication* of reporter genes in gene therapy.
AUTHOR: Boulikas Teni(a); Hsie Linda(a); Kong C F(a); Hu Jie(a); Brooks Dawn(a); Zannis-Hadjopoulos Maria
AUTHOR ADDRESS: (a)Inst. Molecular Med. Sci., 460 Page Mill Road, Palo Alto, CA 94306**USA
JOURNAL: International Journal of Oncology 11 (SUPPL.):p930 1997
CONFERENCE/MEETING: 2nd World Congress on Advances in Oncology Athens, Greece October 16-18, 1997
ISSN: 1019-6439
RECORD TYPE: Citation
LANGUAGE: English

Exploitation of human origins of replication (ORIs) for *extrachromosomal* *replication* of reporter genes in gene therapy.
MISCELLANEOUS TERMS: ...*EXTRACHROMOSOMAL* *REPLICATION*; ...

...*T* *ANTIGEN*;

11/3,K/14 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10989821 BIOSIS NO.: 199799610966
Safety-modified episomal vectors for human gene therapy.
AUTHOR: Cooper Mark J(a); Lippa Mara; Payne Jennifer M; Hatzivassiliou Georgia; Reifenberg Erica; Fayazi Behnaz; Perales Jose C; Morrison Laura J; Templeton Dennis; Piekarz Richard L; Tan June
AUTHOR ADDRESS: (a)Case Western Reserve Univ., Div. Hematology/Oncology, BioMedical Res. Build., 3 West, 10900 Eucl**USA
JOURNAL: Proceedings of the National Academy of Sciences of the United States of America 94 (12):p6450-6455 1997
ISSN: 0027-8424
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: we have developed a safety-modified episomal expression vector that replicates extrachromosomally in human cells. This vector system employs a simian virus 40 (SV40) large *T* *antigen* mutant (107/402-T) that is deficient in binding to human tumor suppressor gene products, including p53, retinoblastoma, and p107, yet retains replication competence. These...

...hamster cells, and no detectable activity in dog, rat, and murine cell lines. Importantly, 107/402-T has enhanced replication activity compared with wild-type *T* *antigen*; this finding may be due, in part, to the inability of p53 and retinoblastoma to inactivate 107/402-T function. We demonstrate that the level...
MISCELLANEOUS TERMS: ...*EXTRACHROMOSOMAL* *REPLICATION*; ...

...LARGE *T*-*ANTIGEN* MUTANT

11/3,K/15 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10138334 BIOSIS NO.: 199698593252
A system utilizing Epstein-Barr virus-based expression vectors for the functional cloning of human fibroblast growth regulators.
AUTHOR: Carsteins Carsten-Peter; Gallo Jean C; Maher Veronica M; McCormick J Justin; Fahl William E(a)
AUTHOR ADDRESS: (a)Lab. Cancer Res., Univ. Wis., 1400 University Ave., Madison, WI 53706**USA
JOURNAL: Gene (Amsterdam) 164 (2):p195-202 1995
ISSN: 0378-1119
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: fibroblast cell line, MSU1.1. The growth characteristics of BB-5 cells did not differ from its parental cell line. BB-5 cells supported the *episomal* *replication* of CMV-EL and C1E-EL and allowed recovery of the vector from Hirt lysates of transfected BB-5 cells. BB-5 cells transformed to...
MISCELLANEOUS TERMS: ...*EBNA-1*...

...*EPISOMAL* *REPLICATION*;

11/3,K/16 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09745054 BIOSIS NO.: 199598199972
SV40-based episomal vectors for cancer gene therapy: *Extrachromosomal* *replication* and high level expression following gene transfer in vivo.
AUTHOR: Cooper M J(a); Tan J; Lippa M; Hatzivassiliou G; Morrison L J; Reifenberg E; Moore H C F
AUTHOR ADDRESS: (a)Case Western Reserve Univ., Cleveland OH 44106**USA
JOURNAL: Proceedings of the American Association for Cancer Research Annual Meeting 36 (0):p249 1995
CONFERENCE/MEETING: Eighty-sixth Annual Meeting of the American Association for Cancer Research Toronto, Ontario, Canada March 18-22, 1995
ISSN: 0197-016X
RECORD TYPE: Citation
LANGUAGE: English

SV40-based episomal vectors for cancer gene therapy: *Extrachromosomal* *replication* and high level expression following gene transfer in vivo.
MISCELLANEOUS TERMS: ...SV40 LARGE *T* *ANTIGEN* GENE...

11/3,K/17 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09486989 BIOSIS NO.: 199497495359
Short Communications: The Bovine *Papilloma* Virus E1 Protein Has ATPase Activity Essential to Viral DNA Replication and Efficient Transformation in Cells.
AUTHOR: MacPherson Paul(a); Thorner Lauren; Parker Lisa M; Botchan Michael
AUTHOR ADDRESS: (a)Cancer Res. Cent., Fac. Med., Univ. Ottawa, 451 Smyth Rd., Ottawa, ON K1H 8M5**Canada
JOURNAL: Virology 204 (1):p403-408 1994
ISSN: 0042-6822
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Short Communications: The Bovine *Papilloma* Virus E1 Protein Has ATPase Activity Essential to Viral DNA Replication and Efficient Transformation in Cells.

ABSTRACT: The bovine *papilloma* virus (BPV) E1 protein essential to viral DNA replication has recently been shown to associate via direct protein-DNA interactions with the viral origin of...
...ATPase activity. Mutations placed throughout the nucleotide binding consensus element abolish the ATPase activity of E1 and render BPV genomes harboring such mutations defective for *episomal* *replication* and impaired for oncogenic transformation.

11/3,K/18 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

03053819 BIOSIS NO.: 000070079437
HUMAN FIBROBLASTS TRANSFORMED BY THE EARLY REGION OF SV-40 DNA ANALYSIS OF FREE VIRAL DNA SEQUENCES
AUTHOR: ZOUZIAS D; JHA K K; MULDER C; BASILICO C; OZER H L
AUTHOR ADDRESS: DEP. PATHOL., N.Y. UNIV. SCH. MED., NEW YORK, N.Y. 10016, USA.
JOURNAL: VIROLOGY 104 (2). 1980. 439-453. 1980
FULL JOURNAL NAME: Virology
CODEN: VIRLA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: frequency is increased by mitomycin C treatment.

Immunofluorescence staining for SV40 T [tumor] antigens also indicates that the cells producing free viral DNA contain higher *T*-*antigen* levels than the rest of the population. The free viral DNA molecules derive from integrated viral sequences following replication in a minority of the cells, rather than originating from a persistent *extrachromosomal* *replication* in every cell.

11/3,K/19 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11529624 EMBASE No: 2002101503
Stable replication of papillomavirus genomes in Saccharomyces cerevisiae
Angeletti P.C.; Kim K.; Fernandes F.J.; Lambert P.F.
P.F. Lambert, Department of Oncology, University of Wisconsin - Madison, Madison, WI 53706 United States
AUTHOR EMAIL: Lambert@oncology.wisc.edu
Journal of Virology (J. VIROL.) (United States) 2002, 76/7 (3350-3358)
CODEN: JOVIA ISSN: 0022-538X
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 51

...as a nuclear plasmid. Two viral proteins, E1, a helicase, and E2, a transcriptional activator and plasmid maintenance factor, are known to contribute to the *episomal* *replication* of the viral genome. Recently, our laboratory discovered that papillomaviruses can also replicate in an E1-independent manner in mammalian cells (K. Kim and P...

...and E2 mutant viral genomes were stably maintained in the absence of selection, indicating the existence of an E2-independent mechanism for plasmid maintenance. The *episomal* *replication* of papillomavirus genomes in yeast provides a genetically manipulatable system in which to investigate cellular factors required for *episomal* *replication* and may provide a novel means for generating infectious papillomavirus.
MEDICAL DESCRIPTORS:
Papilloma virus; Wart virus; Saccharomyces cerevisiae; episome; gene mutation; recombinant plasmid; genetic manipulation; DNA responsive element ; centromere; mitosis; nonhuman; article; priority journal

11/3,K/20 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

11165622 EMBASE No: 2001182238
Roles of the hinge region and the DNA binding domain of the bovine papillomavirus type 1 E2 protein in initiation of DNA replication
Allikas A.; Ord D.; Kurg R.; Kivi S.; Ustav M.
M. Ustav, Department of Microbiology/Virology, Institute of Molecular/Cell Biology, Tartu University/Estonian Biocentre, 23 Riia Street, 51010 Tartu Estonia
AUTHOR EMAIL: ustav@ebc.ee
Virus Research (VIRUS RES.) (Netherlands) 2001, 75/2 (95-106)
CODEN: VIRED ISSN: 0168-1702
PUBLISHER ITEM IDENTIFIER: S0168170201002192
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 34

The bovine papillomavirus (BPV-1) E2 protein is the regulator of *extrachromosomal* *replication* of papillomaviruses. The mutants with C-terminal truncations and in-frame internal deletions were constructed to study the role of structural domains of E2 in...

MEDICAL DESCRIPTORS:
**Papilloma* virus; *DNA replication

11/3,K/21 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

06361678 EMBASE No: 1996025315
Cis and trans requirements for stable episomal maintenance of the BPV-1 replicator
Piirsoo M.; Ustav E.; Mandel T.; Stenlund A.; Ustav M.
Department Microbiology and Virology, Institute Molecular and Cell Biology, Tartu University, 23 Riia Street,EE2400 Tartu Estonia
EMBO Journal (EMBO J.) (United Kingdom) 1996, 15/1 (1-11)
CODEN: EMJCD ISSN: 0261-4189
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...proteins E1 and E2, that are required for initiation of viral DNA replication. We show that these viral proteins are necessary and sufficient for stable *extrachromosomal* *replication*. Using the cell line CHO4.15, we have shown that the bovine *papilloma* virus-1 (BPV-1) minimal origin of replication (MO) is absolutely necessary, but is not sufficient for stable *extrachromosomal* *replication* of viral plasmids. By deletion and insertion analysis, we identified an additional element (minichromosome maintenance element, MME) in the upstream regulatory region of BPV-1...
MEDICAL DESCRIPTORS:
animal cell; article; binding site; cho cell; controlled study; dna replication origin; dna sequence; minichromosome; nonhuman; *papilloma* virus; priority journal; structure activity relation; virus cell transformation

11/3,K/22 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

05179404 EMBASE No: 1992319638
Replication of bovine papillomavirus vectors in murine cells
Waldenstrom M.; Schenstrom K.; Sollerbrant K.; Hansson L.
Symbicom AB, Box 1451,S-90124 Umea Sweden
Gene (GENE) (Netherlands) 1992, 120/2 (175-181)
CODEN: GENED ISSN: 0378-1119
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...into cells harbouring unintegrated replicating BPV-1 genomes resulted in integration of the vector DNA, whereas replication of the resident BPV-1 genomes was unaffected. *Extrachromosomal* *replication* of such a vector was achieved when the enhancer and promoter region of the foreign gene were deleted.
MEDICAL DESCRIPTORS:
animal cell; article; mouse; nonhuman; *papilloma* virus; priority journal; southern blotting

11/3,K/23 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

03917038 EMBASE No: 1989086031
Identification of bovine papillomavirus E1 mutants with increased transforming and transcriptional activity
Schiller J.T.; Kleiner E.; Androphy E.J.; Lowry D.R.; Pfister H.
Laboratory of Cellular Oncology, National Cancer Institute, Bethesda, MD

20892 United States
Journal of Virology (J. VIROL.) (United States) 1989, 63/4 (1775-1782)
CODEN: JOVIA ISSN: 0022-538X
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...open reading frame of bovine papillomavirus type 1 (BPV) has been shown previously to encode trans-acting functions, M and R, that are involved in *extrachromosomal* *replication* of the viral genome. We have determined that several E1 mutants mapping in both the M and R regions and a single mutant of the...
MEDICAL DESCRIPTORS:
**papilloma* virus; *virus cell transformation; *virus mutant; *virus transcription

11/3,K/24 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2002 Elsevier Science B.V. All rts. reserv.

03356673 EMBASE No: 1987109250
Replication of the bovine papillomavirus type 1 genome; antisense transcripts prevent *episomal* *replication*
Bergman P.; Ustav M.; Moreno-Lopez J.; et al.
Department of Medical Genetics, Biomedical Center, S-751 23 Uppsala Sweden
Gene (GENE) (Netherlands) 1986, 50/1-3 (185-193)
CODEN: GENED
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Replication of the bovine papillomavirus type 1 genome; antisense transcripts prevent *episomal* *replication*
MEDICAL DESCRIPTORS:
*dna replication; **papilloma* virus; *virus cell transformation

11/3,K/25 (Item 7 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2002 Elsevier Science B.V. All rts. reserv.

02979346 EMBASE No: 1985073306
Genetic analysis of bovine papillomavirus type 1 trans-acting replication factors
Lusky M.; Botchan M.R.
Department of Molecular Biology, University of California, Berkeley, CA 94720 United States
Journal of Virology (J. VIROL.) (United States) 1985, 53/3 (955-965)
CODEN: JOVIA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

The establishment of bovine papillomavirus type I in somatic mammalian cells is mediated by *extrachromosomal* *replication* and stable maintenance of the viral genome as a multicopy nuclear plasmid. Previous studies indicated the requirement of viral gene expression for bovine papillomavirus type...

...number of the viral plasmid at high levels. Genomes with mutations in the cop and rep complementation groups, when cotransfected, rescued the wild-type phenotype, *extrachromosomal* *replication* with a high, stable copy number for both types of plasmids. Therefore, the gene products acted in trans, and the mutations were recessive to the...
MEDICAL DESCRIPTORS:
*dna replication; *gene sequence; **papilloma* virus; *virus mutation
?ds

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### Status: Path 1 of [Dialog Information Services via Modem]

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***Microcomputer Software Guide Online (File 278)
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***Tax Notes Today (File 790)
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File   1:ERIC  1966-2002/May 10
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      Set  Items  Description
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Cost is in DialUnits
?b 155
       31may02 17:04:04 User259876 Session D351.1
            $0.32    0.092 DialUnits File1
     $0.32  Estimated cost File1
     $0.01  TELNET
     $0.33  Estimated cost this search
     $0.33  Estimated total session cost   0.092 DialUnits


File 155:MEDLINE(R)  1966-2002/May W4
*File 155: Daily alerts are now available. This file has
been reloaded. Accession numbers have changed.

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?s (cryopreserved or cryopreservation) and (DMSO and FCS)
            4114  CRYOPRESERVED
            8568  CRYOPRESERVATION
            5548  DMSO
            2278  FCS
      S1      13  (CRYOPRESERVED OR CRYOPRESERVATION) AND (DMSO AND FCS)
?s s1 and (culture)
              13  S1
          336129  CULTURE
      S2       8  S1 AND (CULTURE)
?t s2/3,k/all

 2/3,K/1
DIALOG(R)File 155:MEDLINE(R)

13018837   21571153   PMID: 11714192
  Islet *cryopreservation* using intracellular preservation solutions.
  Lakey J R; Rajotte R V; Fedorow C A; Taylor M J
  Surgical-Medical Research Institute, Department of Surgery, University of
Alberta, Edmonton, Canada. jonathan.lakey@ualberta.ca
  Cell transplantation (United States)  2001, 10  (7)  p583-9, ISSN
0963-6897  Journal Code: 9208854
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: Completed

  Islet *cryopreservation* using intracellular preservation solutions.
  *Cryopreservation* of islets adds great flexibility to clinical islet
transplant programs. Methods of islet *cryopreservation* have traditionally
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utilized permeating cryoprotectants contained within isotonic solutions without specifically addressing issues of ionic balances, buffering capacity, or oxygen free radicals that occur during...

... was developed as a hypothermic blood substitute. The unique characteristics and composition of these preservation solutions may be important when developing solutions specific for the *cryopreservation* of cells and tissues. It was the aim of this study to evaluate these two hypothermic preservation solutions as the media used in *cryopreservation* of islets. Groups of canine islets [5000 islet equivalents (IE)/group] were *cryopreserved* using the standard protocol of stepwise addition of dimethyl sulfoxide (*DMSO*) to 2 M, controlled nucleation, slow cooling (0.35 degrees C/min), and rapid thawing (200 degrees C/min). The *cryopreservation* solutions were made with 1) UW solution, 2) HTS solution, or 3) Medium 199 solution with 10% fetal calf serum (*FCS*). Additional control groups included islets *cryopreserved* using 4) HTS, 5) UW solution, and 6) Medium 199 alone, without *DMSO*. Recovery of islets immediately following thawing was equivalent between the groups with the exception of the islets *cryopreserved* without *DMSO* (groups 4-6, $p < 0.05$). After 48 h of postcryopreservation tissue *culture*, islet recovery was highest in the groups frozen with UW and HTS (mean +/- SEM) (79.8 +/- 1.9% and 82.5 +/- 1.5%, $p < 0.05$ vs. group 3, 69.1 +/- 3.3%, $p < 0.05$, ANOVA). Less than 15% of the islets were recovered when they were *cryopreserved* without the cryoprotectant *DMSO* (groups 4-6). Functional viability was assessed by measuring the glucose-stimulated insulin secretion during static incubation after 48-h *culture*. The stimulation indexes were 4.6 +/- 1.0, 4.2 +/- 0.8, 3.6 +/- 1.2, 0.6 +/- 0.5, and 0.4 +/- 0.2...
... groups 1-5, respectively. This study demonstrates that postcryopreservation survival can be improved using intracellular-based preservation solutions, including UW or HTS, in conjunction with *DMSO*.
Descriptors: *Cryopreservation*--methods--MT; *Cryoprotective Agents --pharmacology--PD; *Dimethyl Sulfoxide--pharmacology--PD; *Islets of Langerhans Transplantation--methods--MT

2/3,K/2
DIALOG(R)File 155:MEDLINE(R)

12620593 21571153 PMID: 11714192
Islet *cryopreservation* using intracellular preservation solutions.
Lakey J R; Rajotte R V; Fedorow C A; Taylor M J
Surgical-Medical Research Institute, Department of Surgery, University of Alberta, Edmonton, Canada. jonathan.lakey@ualberta.ca
Cell transplantation (United States) 2001, 10 (7) p583-9, ISSN 0963-6897 Journal Code: 9208854
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: In Process

Islet *cryopreservation* using intracellular preservation solutions.
Cryopreservation of islets adds great flexibility to clinical islet transplant programs. Methods of islet *cryopreservation* have traditionally utilized permeating cryoprotectants contained within isotonic solutions without specifically addressing issues of ionic balances, buffering capacity, or oxygen free radicals that occur during...

... was developed as a hypothermic blood substitute. The unique characteristics and composition of these preservation solutions may be important when developing solutions specific for the *cryopreservation* of cells and tissues. It was the aim of this study to evaluate these two hypothermic preservation solutions as the media used in *cryopreservation* of islets. Groups of canine islets [5000 islet equivalents (IE)/group] were *cryopreserved* using the standard protocol of stepwise addition of dimethyl sulfoxide (*DMSO*) to 2 M, controlled nucleation, slow cooling

(0.25 degrees C/min), and rapid thawing (200 degrees C/min). The *cryopreservation* solutions were made with 1) UW solution, 2) HTS solution, or 3) Medium 199 solution with 10% fetal calf serum (*FCS*). Additional control groups included islets *cryopreserved* using 4) HTS, 5) UW solution, and 6) Medium 199 alone, without *DMSO*. Recovery of islets immediately following thawing was equivalent between the groups with the exception of the islets *cryopreserved* without *DMSO* (groups 4-6, $p < 0.05$). After 48 h of postcryopreservation tissue *culture*, islet recovery was highest in the groups frozen with UW and HTS (mean +/- SEM) (79.8 +/- 1.9% and 82.5 +/- 1.5%, $p < 0.05$ vs. group 3, 69.1 +/- 3.3%, $p < 0.05$, ANOVA). Less than 15% of the islets were recovered when they were *cryopreserved* without the cryoprotectant *DMSO* (groups 4-6). Functional viability was assessed by measuring the glucose-stimulated insulin secretion during static incubation after 48-h *culture*. The stimulation indexes were 4.6 +/- 1.0, 4.2 +/- 0.8, 3.6 +/- 1.2, 0.6 +/- 0.5, and 0.4 +/- 0.2...
... groups 1-5, respectively. This study demonstrates that postcryopreservation survival can be improved using intracellular-based preservation solutions, including UW or HTS, in conjunction with *DMSO*.

2/3,K/3
DIALOG(R)File 155:MEDLINE(R)

12508184 21381666 PMID: 11490116
***Cryopreservation* of artificial cartilage: viability and functional examination after thawing.**
Lubke C; Sittinger M; Burmester G R; Paulitschke M
Cell-Lining GmbH, Department of Rheumatology, Charite, Rudower Chausee 29 (OWZ), D-12489 Berlin, Germany. carsten.luebke@cell-lining.de
Cells, tissues, organs (Switzerland) 2001, 169 (4) p368-76, ISSN 1422-6405 Journal Code: 100883360
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

***Cryopreservation* of artificial cartilage: viability and functional examination after thawing.**
In biomedical research and in reconstructive surgery, preservation of intact tissue has been an unsolved problem. In this study, we investigated the viability of *cryopreserved* artificial cartilage and its synthetic activity of cartilage-specific matrix proteins after thawing for in vitro use. A polymer fleece cylinder (diameter = 3 mm; height = 3 mm) was loaded with a suspension of bovine chondrocytes (25 x 10(6)/ml) and encapsulated with fibrin glue. After a *culture* period of 1 week, the artificial cartilage units were frozen in a cryoprotection solution containing 10% basal medium (RPMI 1640), 10% *DMSO* and 80% *FCS*. The freezing procedure consisted of three steps: a 30-min period at +4 degrees C followed by a 24-hour storage at -80 degrees C...

... tissue units were transferred into liquid nitrogen (-196 degrees C) for final storage. Using histochemical staining techniques of cryogenic slices, we investigated the ability of *cryopreserved* artificial cartilage to produce its specific matrix after thawing. A modified MTT assay was used to determine the viability of frozen tissue units in comparison with unpreserved samples at different moments after thawing. Depending on the chondrocytes used for the formation of artificial cartilage, the viability of *cryopreserved* tissue varied between 65 and 85%. Both the intensity of alcian blue staining for proteoglycans and the azan staining for collagens increased proportionally with incubation time after thawing. These findings indicate that *cryopreservation* of small artificial cartilage units is possible with a minor loss of cell viability. Secondly, its synthetic activity of cartilage-specific matrix did not decline...
Descriptors: Biocompatible Materials; *Chondrocytes--metabolism--ME; *
Cryopreservation; *Prostheses and Implants; Cattle; Cell Survival;

Chondrocytes--cytology--CY; Formazans--metabolism--ME; Tetrazolium Salts --metabolism--ME; Tissue *Culture*

2/3,K/4
DIALOG(R)File 155:MEDLINE(R)

11252319 21293398 PMID: 11399098
Biological freezing of human articular chondrocytes.
Almqvist K F; Wang L; Broddelez C; Veys E M; Verbruggen G
Department of Rheumatology, Ghent, University Hospital, University of Ghent, Belgium. fredrik.almqvist@rug.ac.be
Osteoarthritis and cartilage / OARS, Osteoarthritis Research Society (England) May 2001, 9 (4) p341-50, ISSN 1063-4584 Journal Code: 9305697
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... femoral condyles within 24 h post mortem. To optimize the biological freezing procedure, the chondrocytes were control-rate frozen in different concentrations of dimethyl sulfoxide (*DMSO*) in Dulbecco's MEM supplemented with 10% *FCS* before being thawed and the cell viability was determined by Trypan Blue exclusion test. To investigate the effect of control-rate freezing on chondrocyte metabolism, control-rate frozen chondrocytes in 5% *DMSO* were thawed and cultured in gelled agarose for 2 weeks. Non-frozen chondrocytes cultured in agarose served as controls. Furthermore, human articular chondrocytes were cultured in 2% alginate beads for 2 weeks after which the beads were incubated with 5% *DMSO* for 0 h, 2.5 h, 5 h and 10 h and frozen at -196 degrees C. Non-frozen alginate beads containing chondrocytes and incubated with 5% *DMSO* served as a control. After 2 weeks in *culture*, chondrocytes in agarose or in alginate were sulfated with 10 microCi(35)SO(4)/ml for 48 h. The total production of aggrecans, and the aggrecan subtypes, were subsequently determined. RESULTS: Five percent *DMSO* in the *culture* medium was the optimal condition to control-rate freeze and recover viable and functional isolated chondrocytes. Total aggrecan synthesis of control-rate frozen chondrocytes cultured...

... chondrocytes kept in agarose remained unaltered. Chondrocytes, control-rate frozen in the alginate matrix, showed a 0-30% decrease in total aggrecan synthesis rates in *culture* when compared with the non-frozen chondrocytes. The optimal pre-incubation time of the alginate beads with 5% *DMSO* was 5 h, without any change in aggrecan synthesis rates when compared with the control situation. Shorter pre-incubation times resulted in an insufficient diffusion of *DMSO* into the beads and in cell death. There was no difference in the synthesis of the different aggrecan subtypes between frozen and non-frozen chondrocytes...
...at -196 degrees C for 24 h without important decreases in their aggrecan synthesis rates when control-rate frozen as a cell suspension in 5% *DMSO*. Proportions of the aggrecan subtypes (monomers, aggregates) synthesized by chondrocytes cultured in agarose remained unchanged. The control-rate freezing procedure in the alginate beads pre-incubated with 5% *DMSO* for 5 h produced no decrease in total aggrecan synthesis rates and no change in the synthesized aggrecan subtypes. Further experiments have to confirm the ...
; Adult; Alginates; Cartilage, Articular--cytology--CY; *Cryopreservation*--methods--MT; Cryoprotective Agents; Dimethyl Sulfoxide; Middle Age; Proteoglycans--metabolism--ME

2/3,K/5
DIALOG(R)File 155:MEDLINE(R)

10943379 20498996 PMID: 11042280

A method for the production of *cryopreserved* aliquots of antigen-preloaded, mature dendritic cells ready for clinical use.

Feuerstein B; Berger T G; Maczek C; Roder C; Schreiner D; Hirsch U; Haendle I; Leisgang W; Glaser A; Kuss O; Diepgen T L; Schuler G; Schuler-Thurner B

Department of Dermatology University of Erlangen-Nuremberg, D-91052, Erlangen, Germany.

Journal of immunological methods (NETHERLANDS) Nov 1 2000, 245 (1-2) p15-29, ISSN 0022-1759 Journal Code: 1305440

Document type: Evaluation Studies; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

A method for the production of *cryopreserved* aliquots of antigen-preloaded, mature dendritic cells ready for clinical use.

Dendritic cells (DC) are increasingly used as a vaccine. Unfortunately, a satisfactory *cryopreservation* of DC in the absence of *FCS* is not yet available, so that laborious repeated generation of DC from fresh blood or frozen peripheral blood mononuclear cells for each vaccination has been required to date. We now aimed at developing an effective *cryopreservation* method, and by testing several variables found that it was crucial to combine the most advantageous maturation stimulus with an improved freezing procedure. We generated...

... stimuli the cocktail consisting of TNF-alpha+IL-1 beta+IL-6+PGE(2) achieved the highest survival of mature DC. We then systematically explored *cryopreservation* conditions, and found that freezing matured DC at 1 degrees C/min in pure autologous serum+10% *DMSO*+5% glucose at a cell density of 10x10(6) DC/ml gave the best results. Using this approach 85-100% of the frozen DC could...

... improved DC survival. Importantly, we demonstrate that DC can effectively be loaded with antigens (such as Tetanus Toxoid, influenza matrix and melan A peptides) before *cryopreservation* so that it is now possible to generate antigen-preloaded, frozen DC aliquots that after thawing can be used right away. This is an important...

Descriptors: Antigens--administration and dosage--AD; **Cryopreservation* --methods--MT; *Dendritic Cells...; Ligand--administration and dosage--AD; Carrier Proteins--administration and dosage--AD; Cell Differentiation; Cell Survival; Dendritic Cells--cytology--CY; Dendritic Cells--immunology--IM; Immunotherapy; Lymphocyte *Culture* Test, Mixed; Lymphocyte Transformation; Membrane Glycoproteins--administration and dosage--AD; T-Lymphocytes, Cytotoxic--immunology--IM; Tetanus Toxoid--administration and dosage--AD; Vaccines--administration and dosage...

2/3,K/6

DIALOG(R)File 155:MEDLINE(R)

07926721 94061497 PMID: 8242338

Susceptibility of human foetal brain tissue to cool- and freeze-storage.

Dong J F; Detta A; Hitchcock E R

Department of Neurosurgery, University of Birmingham, Smethwicks, UK.

Brain research (NETHERLANDS) Sep 10 1993, 621 (2) p242-8, ISSN 0006-8993 Journal Code: 0045503

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... protocol combining vital staining with cell density counts so that tissue viability and cell loss could be evaluated simultaneously; tissue survivability was evaluated by cell *culture*. A significant amount of cell loss occurred after 24 h storage at room temperature, after one week at 4 degrees C and by two weeks...

...degrees C resulted in 17-21% cell loss at the end of a 6 week period. At -20 degrees C the cryoprotective effect of 20% *FCS* was equivalent to that of 15% *FCS* + 7% *DMSO* combined, suggesting potential use of serum in replacement of chemical additives. The procedure for removal of *DMSO* was critical to cell viability and survivability: single step dilution led to 27-39% greater cell loss than slow, multi-step dilutions. In comparison to ...

Descriptors: Brain--embryology--EM; **Cryopreservation*

2/3,K/7

DIALOG(R)File 155:MEDLINE(R)

07674740 93200271 PMID: 8452937

Normal fertilization and development of frozen-thawed mouse oocytes: protective action of certain macromolecules.

Carroll J; Wood M J; Whittingham D G

MRC Experimental Embryology and Teratology Unit, St. George's Hospital Medical School, London, United Kingdom.

Biology of reproduction (UNITED STATES) Mar 1993, 48 (3) p606-12, ISSN 0006-3363 Journal Code: 0207224

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... the zona pellucida that reduce fertilization. The fertilization and development of oocytes were studied after freezing and thawing in media containing 1.5 M dimethylsulfoxide (*DMSO*) and various macromolecular supplements: BSA (Fraction V and crystalline), fetal calf serum (*FCS*), and polyvinyl alcohol (PVA). In conditions under which the fertilization rate of oocytes frozen in medium containing BSA was reduced, oocytes frozen in medium containing *FCS* were fertilized at rates approaching those of nonfrozen controls. Significantly fewer oocytes were fertilized after freezing in the presence of PVA than oocytes frozen in medium containing BSA or *FCS* . Fertilization of oocytes frozen in the presence of PVA was significantly increased when serum was included in the medium during dilution of the cryoprotectant. The...

... in the freezing medium and was similar to that of nonfrozen control oocytes. The results show that given the appropriate conditions for freezing and thawing, *cryopreserved* mouse oocytes undergo fertilization and development at rates similar to those for nonfrozen controls.

Descriptors: *Cryopreservation*--methods--MT; *Fertilization in Vitro; *Oocytes; Cell Survival; Cryoprotective Agents; *Culture* Media; Evaluation Studies; Mice; Oocytes--growth and development--GD; Polyvinyl Alcohol; Serum Albumin, Bovine

Chemical Name: Cryoprotective Agents; *Culture* Media; Serum Albumin, Bovine; Polyvinyl Alcohol

2/3,K/8

DIALOG(R)File 155:MEDLINE(R)

07370660 92304613 PMID: 1610593

Improved endothelial viability of heart valves *cryopreserved* by a new technique.

Feng X J; van Hove C E; Mohan R; Andries L; Rampart M; Herman A G; Walter P J

Department of Cardiac Surgery, Faculty of Medicine, University of Antwerp, Belgium.

European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery (GERMANY) 1992, 6 (5) p251-5, ISSN 1010-7940 Journal Code: 8804069

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Improved endothelial viability of heart valves *cryopreserved* by a new technique.

The aim of this study was to compare different techniques of aortic valve *cryopreservation* by studying the viability of the endothelial cells. Viability was assessed by measuring their in vitro prostacyclin (PGI2) production under basal and stimulated conditions. Fresh and *cryopreserved* porcine valves were incubated at 37 degrees C in tissue *culture* medium and PGI2 content in the medium was measured every 15 min up to 300 min. *Cryopreservation* by the older procedure A included 5% fetal calf serum (*FCS*) in the preservation medium, a plastic box inside a freezing plastic bag, a cooling schedule approximating -2 degrees C/min, a long thawing time and few dilution steps of the cryoprotectant dimethylsulphoxide (*DMSO*). The newer procedure B differed from A in packaging, freezing and thawing rates and *DMSO* dilution. Procedure C was similar to B with the exception that *FCS* was omitted. Leaflets preserved by procedure A produced significantly less prostacyclin as compared to those treated according to procedures B or C. We conclude that minor differences in the *cryopreservation* method can become critical to endothelial functional viability.

Descriptors: Bioprosthesis; *Cell Survival--physiology--PH; * *Cryopreservation*--methods--MT; *Endothelium, Vascular--cytology--CY; *Graft Survival--physiology--PH; *Heart Valve Prosthesis

?ds

Set	Items	Description
S1	13	(CRYOPRESERVED OR CRYOPRESERVATION) AND (DMSO AND FCS)
S2	8	S1 AND (CULTURE)

?s s1 not s2

	13	S1
	8	S2
S3	5	S1 NOT S2

?t s3/3,k/all

3/3,K/1

DIALOG(R)File 155:MEDLINE(R)

11046430 21030595 PMID: 11191861

Vitrification and rapid-freezing of cumulus cells from rabbits and pigs.

Saeed A M; Escriba M J; Silvestre M A; Garcia-Ximenez F
Departamento Ciencia Animal, Universidad Politecnica de Valencia, Spain.

Theriogenology (United States) Dec 1 2000, 54 (9) p1359-71, ISSN 0093-691X Journal Code: 0421510
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

To use adult somatic cloning technology in animal breeding, this technology should be complemented with nuclear donor cell *cryopreservation* . Two different conventional nonequilibrium methods (vitrification, V: 3.58M EG and 2.82M *DMSO* in PBS plus 20% *FCS* and rapid-freezing, RF: 0.25M sucrose, 2.25M EG and 2.25M *DMSO* in PBS plus 20% *FCS*) were assayed here on different cumuli types from rabbits and pigs. In rabbits, the cell proliferation capability of fully disaggregated cumuli was not affected by *cryopreservation* procedures (V: 100% and RF: 82%). Vitrified samples from partially or non-disaggregated cumuli showed the lowest proliferation frequencies (4% and 0%, respectively). In pigs... ... 72% vs 100% or 100%, respectively; P < 0.05). In both species, in vitro cultured sub-confluent samples were able to survive to a second *cryopreservation* treatment, maintaining the cell proliferation capability in nearly 50% of thawed samples. In conclusion, before *cryopreservation*, disaggregation of cumulus cells from both species into small clusters of

cells improved their viability after thawing. These results allow us to efficiently, easily and...
Descriptors: *Cryopreservation*--methods--MT; *Oocytes--physiology--PH; *Ovary--cytology--CY; *Rabbits; *Swine

3/3,K/2
DIALOG(R)File 155:MEDLINE(R)

08123878 94253279 PMID: 8195329
Influence of the developmental stage and the equilibration time on the outcome of ultrarapid *cryopreservation* of mouse embryos.
Bernart W; Kamel M; Neulen J; Breckwoldt M
Department of Obstetrics and Gynaecology, University of Freiburg, Germany.
Human reproduction (Oxford, England) (ENGLAND) Jan 1994, 9 (1) p100-2, ISSN 0268-1161 Journal Code: 8701199
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Influence of the developmental stage and the equilibration time on the outcome of ultrarapid *cryopreservation* of mouse embryos.
...in 0.25 ml French straws after various periods of equilibration (1, 3, 5 and 9 min) in freezing-buffer containing 3.5 M dimethylsulphoxide (*DMSO*), 0.05 M sucrose, and 20% fetal calf serum (*FCS*) in phosphate buffered saline (PBS). After thawing in a 37 degrees C waterbath and dilution for 5 min in 0.25 M sucrose in PBS/*FCS* the embryos were cultured in Ham's F10 medium with 10% *FCS* (37 degrees C, 5% CO2, 95% humidity) for 4-6 days. The rates of expanded and hatching blastocysts were then evaluated and compared to the...
Descriptors: Cleavage Stage, Ovum--physiology--PH; **Cryopreservation*

3/3,K/3
DIALOG(R)File 155:MEDLINE(R)

07490121 93017963 PMID: 1401957
In vitro proliferation and the cytotoxic specificity of a *cryopreserved* cytotoxic T cell clone reacting against human autologous tumor cells.
Wada Y; Ikeda H; Ueda D; Ohta M; Takahashi S; Hirata K; Sato N; Kikuchi K
Department of Pathology, Sapporo Medical College, Japan.
Journal of immunological methods (NETHERLANDS) Oct 2 1992, 154 (2) p235-43, ISSN 0022-1759 Journal Code: 1305440
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

In vitro proliferation and the cytotoxic specificity of a *cryopreserved* cytotoxic T cell clone reacting against human autologous tumor cells.
Proliferation and functional maintenance of CTL after cell *cryopreservation* often proves to be quite difficult. We developed an improved method for proliferating *cryopreserved* CTL, and for gaining their specific cytotoxic function. T cells were *cryopreserved* at -180 degrees C in RPMI 1640 containing 50% *FCS* and 10% *DMSO*. The *cryopreserved* T cells were well recovered by culturing in a medium containing the supernatant of primary cultures with TIL and autologous tumor cells, in addition to...
; Antigens, Surface--analysis--AN; Cells, Cultured; Clone Cells; *Cryopreservation*; Interleukin-2--pharmacology--PD; Recombinant Proteins --pharmacology--PD; T-Lymphocytes, Cytotoxic--cytology--CY

3/3,K/4

DIALOG(R)File 155:MEDLINE(R)

07467929 92408801 PMID: 1528275

Sucrose promotes the functional activity of blood vessels after *cryopreservation* in *DMSO*-containing fetal calf serum.

Muller-Schweinitzer E; Ellis P

Preclinical Research, Sandoz Pharma AG, Basel, Switzerland.

Naunyn-Schmiedeberg's archives of pharmacology (GERMANY) May 1992, 345 (5) p594-7, ISSN 0028-1298 Journal Code: 0326264

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Sucrose promotes the functional activity of blood vessels after *cryopreservation* in *DMSO*-containing fetal calf serum.

... F2 alpha and KCl and relaxant responses to substance P and 5-HT were determined on fresh tissues and after cryostorage in fetal calf serum (*FCS*) containing either 1.8 M dimethyl sulfoxide (*DMSO*), or 0.1 M sucrose or both agents combined. The data demonstrate that the addition of sucrose to the *DMSO*-containing cryomedium promotes the preservation of both contractile and relaxant activity of cryostored blood vessels, though sucrose alone did not confer any noticeable protection.

Descriptors: Blood Vessels--drug effects--DE; **Cryopreservation*; *Sucrose--pharmacology--PD

3/3,K/5

DIALOG(R)File 155:MEDLINE(R)

06062278 89138172 PMID: 2465240

***Cryopreservation* of isolated blood vessels.**

Muller-Schweinitzer E

Preclinical Research, SANDOZ Ltd, Basel, Switzerland.

Folia haematologica : internationales Magazin fur klinische und morphologische Blutforschung (GERMANY, EAST) 1988, 115 (3) p405-9, ISSN 0015-556X Journal Code: 0374615

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

***Cryopreservation* of isolated blood vessels.**

Canine saphenous veins were immersed in fetal calf serum (*FCS*) containing various cryoprotective agents, slowly frozen and stored for several weeks at subzero temperatures. Pharmacological investigations of frozen/thawed tissues revealed considerable attenuation of the...

...stored canine veins was obtained on tissues which had been frozen slowly to -70 degrees C and stored in liquid nitrogen while being immersed in *FCS* containing 1.8 mol/l dimethyl sulfoxide (*DMSO*). Though the maximum response to noradrenaline of helical strips prepared from these veins was diminished to about 60% the evidence suggests that there may be...

... main biochemical properties, such as monoamine oxidase activity, endogenous prostaglandin synthesis and neuronal uptake mechanism in veins stored under these conditions. The same method of *cryopreservation* was applied to store samples of human veins. Comparison of the pD2 values for various agonists and of the blocking activities of various antagonists of ...

?ds

Set	Items	Description
S1	13	(CRYOPRESERVED OR CRYOPRESERVATION) AND (DMSO AND FCS)
S2	8	S1 AND (CULTURE)
S3	5	S1 NOT S2

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               $2.73  13 Type(s) in Format  3
            $2.73  13 Types
      $4.39  Estimated cost File155
      $1.30  TELNET
      $5.69  Estimated cost this search
      $6.02  Estimated total session cost   0.611 DialUnits


### Status: Signed Off. (6 minutes)
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Status: Path 1 of [Dialog Information Services via Modem]

Status: Initializing TCP/IP using UseTelnetProto 1 ServiceID pto-dialog
Trying 3106900061...Open

DIALOG INFORMATION SERVICES
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Status: Signing onto Dialog
****
ENTER PASSWORD:
******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 01.08.22D

Last logoff: 23aug01 17:06:38
Logon file001 25aug01 12:20:15
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***Investext PDF Index (File 745)
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***Kompass Canada (File 594)
***CANCERLIT (File 159)
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File 1:ERIC 1966-2001/Aug 17
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            $0.27    0.078 DialUnits File1
     $0.27  Estimated cost File1
     $0.01  TYMNET
     $0.28  Estimated cost this search
     $0.28  Estimated total session cost   0.078 DialUnits


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  File   5:Biosis Previews(R)  1969-2001/Aug W3
         (c) 2001 BIOSIS
  File  73:EMBASE  1974-2001/Aug W3
         (c) 2001 Elsevier Science B.V.
*File  73: For information about Explode feature please
see Help News73.

      Set  Items  Description
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?s (supertransfection) and ((extrachromosomal or episomal) (w) replication
             36  SUPERTRANSFECTION
           8036  EXTRACHROMOSOMAL
           2999  EPISOMAL
         218908  REPLICATION
            221  (EXTRACHROMOSOMAL OR EPISOMAL)(W)REPLICATION
      S1       3  (SUPERTRANSFECTION) AND ((EXTRACHROMOSOMAL OR EPISOMAL)
                  (W) REPLICATION)
?rd
...completed examining records
      S2       1  RD (unique items)
?t s2/3,k/all

 2/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07713269   93013032   PMID: 1327973
 Replication of bovine papillomavirus vectors in murine cells.
  Waldenstrom M; Schenstrom K; Sollerbrant K; Hansson L
  KabiGen, Kabi Pharmacia AB, Stockholm, Sweden.
  Gene (NETHERLANDS)  Oct 21 1992,  120  (2)  p175-81,  ISSN 0378-1119
Journal Code: FOP
  Languages: ENGLISH
  Document type: Journal Article
  Record type: Completed

  ... expression  vectors. This result was obtained with clones isolated by
co-transfection  followed  by  neomycin  selection,  as well as with clones
isolated  from  neoplastic  foci.  *Supertransfection*  of  a  BPV-1-based
expression  vector  into  cells  harbouring  unintegrated replicating BPV-1
genomes  resulted  in integration of the vector DNA, whereas replication of
the resident BPV-1 genomes was unaffected. *Extrachromosomal* *replication*
of  such a vector was achieved when the enhancer and promoter region of the
foreign gene were deleted.
?ds

Set     Items   Description
S1          3   (SUPERTRANSFECTION) AND ((EXTRACHROMOSOMAL OR EPISOMAL) (W)
              REPLICATION)
S2          1   RD (unique items)
?s ((extrachromosomal or episomal) (w) replication
            8036  EXTRACHROMOSOMAL
            2999  EPISOMAL
```

```
          218908  REPLICATION
      S3     221  ((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION
?s s3 and (replication (w) factor)
             221  S3
          218908  REPLICATION
         1663195  FACTOR
             958  REPLICATION(W)FACTOR
      S4       0  S3 AND (REPLICATION (W) FACTOR)
?s s3 and ((second or third) (w) vector)
             221  S3
          831149  SECOND
          408299  THIRD
          172069  VECTOR
             211  (SECOND OR THIRD)(W)VECTOR
      S5       0  S3 AND ((SECOND OR THIRD) (W) VECTOR)
?s s3 and (polyoma or papilloma or SV40)
             221  S3
            8568  POLYOMA
           26452  PAPILLOMA
           25708  SV40
      S6      41  S3 AND (POLYOMA OR PAPILLOMA OR SV40)
?rd
...completed examining records
      S7      24  RD (unique items)
?s s7 and (ES or (pluripotent (w) cell))
              24  S7
           28217  ES
            6739  PLURIPOTENT
         5457308  CELL
             223  PLURIPOTENT(W)CELL
      S8       0  S7 AND (ES OR (PLURIPOTENT (W) CELL))
?s s7 and (ES or EC or EG)
              24  S7
           28217  ES
         2498992  EC
           16250  EG
      S9       5  S7 AND (ES OR EC OR EG)
?t s9/3,k/all
```

9/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

09830760 98239756 PMID: 9571140

Eukaryotic expression vectors that replicate to low copy number in bacteria: transient expression of the Menkes protein.

Fontaine SL; Firth SD; Lockhart PJ; Paynter JA; Mercer JF

The Murdoch Institute for Research into Birth Defects, Royal Children's Hospital, Parkville, Victoria, 3052, Australia.

Plasmid (UNITED STATES) 1998, 39 (3) p245-51, ISSN 0147-619X Journal Code: P8P

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

...either constitutive or inducible promoters; (3) a chimeric intron, for enhancing gene expression, is present; (4) they contain unique cloning sites; (5) they have an *SV40* polyadenylation signal, and a subset of the vectors have an *SV40* origin of replication for *episomal* *replication* and transient gene expression. A cDNA encoding the Menkes disease protein was cloned into two of these vectors, and transient expression studies in COS-7...

Enzyme No.: *EC* 3.6.1.3 (Adenosinetriphosphatase)

9/3,K/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

08241303 94378516 PMID: 8091670

The bovine *papilloma* virus E1 protein has ATPase activity essential to viral DNA replication and efficient transformation in cells.

MacPherson P; Thorner L; Parker LM; Botchan M

Department of Molecular and Cell Biology, University of California, Berkeley 94720.

Virology (UNITED STATES) Oct 1994, 204 (1) p403-8, ISSN 0042-6822 Journal Code: XEA

Contract/Grant No.: CA42414, CA, NCI; ES01896, ES, NIEHS

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

The bovine *papilloma* virus E1 protein has ATPase activity essential to viral DNA replication and efficient transformation in cells.

The bovine *papilloma* virus (BPV) E1 protein essential to viral DNA replication has recently been shown to associate via direct protein-DNA interactions with the viral origin of...

... ATPase activity. Mutations placed throughout the nucleotide binding consensus element abolish the ATPase activity of E1 and render BPV genomes harboring such mutations defective for *episomal* *replication* and impaired for oncogenic transformation.

Enzyme No.: *EC* 3.6.1.3 (Adenosinetriphosphatase)

9/3,K/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

04764295 85027172 PMID: 6092063

Origin of replication in episomal bovine *papilloma* virus type 1 DNA isolated from transformed cells.

Waldeck W; Fosl F; Zentgraf H

EMBO journal (ENGLAND) Sep 1984, 3 (9) p2173-8, ISSN 0261-4189 Journal Code: EMB

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Origin of replication in episomal bovine *papilloma* virus type 1 DNA isolated from transformed cells.

The origin of replication of bovine *papilloma* virus type 1 (BPV-1) has been determined by isolating replicative intermediates (RI) of BPV-transformed hamster embryo fibroblasts (HEF-BPV). These RI were treated ...

... at 6940 +/- 50 bp in the physical map. In a second set of experiments BPV-1 DNA fragments cloned in pBR322 were tested for transient *episomal* *replication*. Transfected cells were harvested after increasing periods of time and screened for replication with isoschizomeric restriction enzymes to differentiate between input and replicated DNA. The...

Enzyme No.: *EC* 3.1.21 (DNA Restriction Enzymes)

9/3,K/4 (Item 4 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

04753714 84106844 PMID: 6319020

Characterization of the bovine *papilloma* virus plasmid maintenance sequences.

Lusky M; Botchan MR

Cell (UNITED STATES) Feb 1984, 36 (2) p391-401, ISSN 0092-8674 Journal Code: CQ4

Contract/Grant No.: CA 30490, CA, NCI

Languages: ENGLISH

Document type: Journal Article
Record type: Completed

Characterization of the bovine *papilloma* virus plasmid maintenance sequences.

Bovine *Papilloma* Virus (BPV-1) establishes itself as a multicopy nuclear plasmid in somatic mammalian cells in culture. We report here that two discontinuous regions within the viral genome can independently support *extrachromosomal* *replication* of the Tn5 neomycinr gene in cells that provide viral factors in trans. The viral plasmid maintenance sequences (PMS) act in cis and will integrate...

Enzyme No.: *EC* 3.1.21 (DNA Restriction Enzymes)

9/3,K/5 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06361678 EMBASE No: 1996025315

Cis and trans requirements for stable episomal maintenance of the BPV-1 replicator

Piirsoo M.; Ustav E.; Mandel T.; Stenlund A.; Ustav M.

Department Microbiology and Virology, Institute Molecular and Cell Biology, Tartu University, 23 Riia Street,EE2400 Tartu Estonia

EMBO Journal (EMBO J.) (United Kingdom) 1996, 15/1 [illegible]

CODEN: EMJOD ISSN: 0261-4189

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...proteins E1 and E2, that are required for initiation of viral DNA replication. We show that these viral proteins are necessary and sufficient for stable *extrachromosomal* *replication*. Using the cell line CHO4.15, we have shown that the bovine *papilloma* virus-1 (BPV-1) minimal origin of replication (MO) is absolutely necessary, but is not sufficient for stable *extrachromosomal* *replication* of viral plasmids. By deletion and insertion analysis, we identified an additional element (minichromosome maintenance element, MME) in the upstream regulatory region of BPV-1...

DRUG DESCRIPTOPS:
virus dna--endogenous compound--*ec*; virus protein

MEDICAL DESCRIPTORS:
animal cell; article; binding site; cho cell; controlled study; dna replication origin; dna sequence; minichromosome; nonhuman; *papilloma* virus; priority journal; structure activity relation; virus cell transformation

?ds

Set	Items	Description
S1	3	(SUPERTRANSFECTION) AND ((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S2	1	RD (unique items)
S3	221	((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S4	0	S3 AND (REPLICATION (W) FACTOR)
S5	0	S3 AND ((SECOND OR THIRD) (W) VECTOR)
S6	41	S3 AND (POLYOMA OR PAPILLOMA OR SV40)
S7	24	RD (unique items)
S8	0	S7 AND (ES OR (PLURIPOTENT (W) CELL))
S9	5	S7 AND (ES OR EC OR EG)

?t s7/3,k/all

7/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

09830760 98239756 PMID: 9571140

Eukaryotic expression vectors that replicate to low copy number in bacteria: transient expression of the Menkes protein.

Fontaine SL; Firth SD; Lockhart PJ; Paynter JA; Mercer JF

The Murdoch Institute for Research into Birth Defects, Royal Children's Hospital, Parkville, Victoria, 3052, Australia.
Plasmid (UNITED STATES) 1998, 39 (3) p245-51, ISSN 0147-619X
Journal Code: P8P
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

...either constitutive or inducible promoters; (3) a chimeric intron, for enhancing gene expression, is present; (4) they contain unique cloning sites; (5) they have an *SV40* polyadenylation signal, and a subset of the vectors have an *SV40* origin of replication for *episomal* *replication* and transient gene expression. A cDNA encoding the Menkes disease protein was cloned into two of these vectors, and transient expression studies in COS-7...

7/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09349518 97345683 PMID: 9202175
Production and characterization of a mutant cell line defective in aminophospholipid translocase.
Zhao J; Sims PJ; Wiedmer T
Blood Research Institute, The Blood Center of Southeastern Wisconsin, Milwaukee 53201-2178, USA.
Biochimica et biophysica acta (NETHERLANDS) Jun 5 1997, 1357 (1) p57-64, ISSN 0006-3002 Journal Code: A0W
Contract/Grant No.: HL36946, HL, NHLBI
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

... M2711 exhibited a growth pattern indistinguishable from that of wild-type SV-T2 cells, and SV-40 large T antigen, which is needed for efficient *episomal* *replication* of plasmids containing the *SV40* origin of replication, was unchanged. Finally, transfection of M2711 with cDNAs for marker membrane proteins consistently resulted in the same high level of protein expression...

7/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08680970 96091344 PMID: 8529099
Expression cloning of cDNAs that render cancer cells resistant to Pseudomonas and diphtheria toxin and immunotoxins.
Brinkmann U; Brinkmann E; Pastan I
Laboratory of Molecular Biology, Division of Cancer Biology, Diagnosis, and Centers, Bethesda, Maryland, USA.
Molecular medicine (UNITED STATES) Jan 1995, 1 (2) p206-16, ISSN 1076-1551 Journal Code: CG3
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

... METHODS: To investigate how cells can become resistant to PE-derived immunotoxins, we constructed an immunotoxin-sensitive MCF-7 breast cancer cell line that contains *SV40* T antigen and allows *episomal* *replication* of *SV40* origin containing plasmids. We transfected a pCDM8/HeLa cDNA expression library into these cells, thereby causing over-expression of the plasmid-encoded genes. The transfected...

7/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08639096 96078382 PMID: 7580118

Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region.

Kobayashi M; Yamauchi Y; Yamaguchi K; Tanaka A
Morinaga Milk Branch, Research Institute of Innovative Technology for the Earth, Kanagawa, Japan.

Antisense research and development (UNITED STATES) Summer 1995, 5 (2) p141-8, ISSN 1050-5261 Journal Code: BI7
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region.

We have developed a transient expression assay for selection of effective antisense RNAs using *episomal* *replication* of plasmids in COS-7 cells, an African green monkey kidney-derived cell line expressing *SV40* large T antigen. The transient expression assay was enabled by a liposome-mediated DNA transfection method, by which about 70% of the cells were reproducibly transfected with exogenous DNAs. Plasmids expressing antisense RNAs for the retinoblastoma gene (Rb-1) mRNA and harboring *SV40* ori were constructed and introduced into COS-7 cells to examine their inhibitory effect on the accumulation of endogenous Rb protein (pRb). Only the antisense...

7/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08241303 94378516 PMID: 8091670

The bovine *papilloma* virus E1 protein has ATPase activity essential to viral DNA replication and efficient transformation in cells.

MacPherson P; Thorner L; Parker LM; Botchan M
Department of Molecular and Cell Biology, University of California, Berkeley 94720.

Virology (UNITED STATES) Oct 1994, 204 (1) p403-8, ISSN 0042-6822 Journal Code: XEA
Contract/Grant No.: CA42414, CA, NCI; ES01896, ES, NIEHS
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

The bovine *papilloma* virus E1 protein has ATPase activity essential to viral DNA replication and efficient transformation in cells.

The bovine *papilloma* virus (BPV) E1 protein essential to viral DNA replication has recently been shown to associate via direct protein-DNA interactions with the viral origin of...

... ATPase activity. Mutations placed throughout the nucleotide binding consensus element abolish the ATPase activity of E1 and render BPV genomes harboring such mutations defective for *episomal* *replication* and impaired for oncogenic transformation.

7/3,K/6 (Item 6 from file: 155)
DIALOG(R File 155:MEDLINE R)

07748561 92307747 PMID: 1377172

A new approach to the cloning of genes encoding T-cell epitopes.

Scott DM; Dyson PJ; Simpson E
Transplantation Biology Section, Clinical Research Centre, Harrow, Middlesex, UK.

Immunogenetics (UNITED STATES) 1992, 36 2 p86-94, ISSN [illegible]
Journal Code: GI4
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

... clones, and subsequent recovery of the integrated DNA by cosmid rescue. We have modified this technique and have stably transfected P1.HTR cell lines with *polyoma* T antigen, which allows *episomal* *replication* of the shuttle vector, pCDM8. Using pCDM8-CAT constructs, we have determined the frequency of transfection and plasmid copies taken up per cell under optimal...

7/3,K/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06719643 91058637 PMID: 2173930
***Polyoma* DNA replication dependent upon growth condition of SEWA sarcoma cells.**
Robinson R; Ronai Z
Molecular Carcinogenesis Program, American Health Foundation, Valhalla, New York 10595.
Molecular carcinogenesis (UNITED STATES) 1990, 3 (5) p268-72, ISSN 0899-1987 Journal Code: AEQ
Contract/Grant No.: CA17613, CA, NCI
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

***Polyoma* DNA replication dependent upon growth condition of SEWA sarcoma cells.**
Extrachromosomal *replication* of viral DNA sequences has been observed in transformed as well as in normal cells following "stress"-inducing treatments. To explore the effect of growth...

... grew subcutaneously or as ascites tumors in vivo as well as cell lines that were established from each of these tumors. The replicative form of *polyoma* DNA sequences was observed in SEWA tumors grown in ascites fluids but not in cells maintained as solid tumors. *Polyoma* DNA replication was found in ascites-derived cells that were adapted to grow in culture, only when the cultured cells are stimulated with UV irradiation...

7/3,K/8 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05749319 86301878 PMID: 3017813
An inducible eukaryotic host-vector expression system: amplification of genes under the control of the *polyoma* late promoter in a cell line producing a thermolabile large T antigen.
Kern FG; Basilico C
Gene (NETHERLANDS) 1986, 43 (3) p237-45, ISSN 0378-1119 Journal Code: FOP
Contract/Grant No.: 5T32 CA09161, CA, NCI; CA11893, CA, NCI
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

An inducible eukaryotic host-vector expression system: amplification of genes under the control of the *polyoma* late promoter in a cell line producing a thermolabile large T antigen.
We have taken advantage of the inherent instability of integrated *polyoma* (Py) DNA sequences in the presence of a functional viral large T antigen (LT) to develop a eukaryotic host-vector system where copy number is...

... resident Py sequences present in the WOP32-4 cells cannot excise due to an ori deletion. However, excision of the transfected plasmid molecules and subsequent *extrachromosomal* *replication* occur at high rates leading in some cases to the production of 1000-2000 copies per cell (average) of the plasmid. Proportional increases in either...

7/3,K/9 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05712868 85137496 PMID: 2983188
Characterization of a retrovirus shuttle vector capable of either proviral integration or *extrachromosomal* *replication* in mouse cells.
Berger SA; Bernstein A
Molecular and cellular biology (UNITED STATES) Feb 1985, 5 (2) p305-12, ISSN 0270-7306 Journal Code: MGY
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Characterization of a retrovirus shuttle vector capable of either proviral integration or *extrachromosomal* *replication* in mouse cells.
... also have been included in this vector. Infection of normal rodent cells results in single-copy proviral integration, whereas infection of mouse (MOP) cells expressing *polyoma* large T antigen results in *extrachromosomal* *replication* of the DNA form of the virus. The copy number of the extrachromosomal circles in MOP cells varies from 0 to 100 copies per cell...

7/3,K/10 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04764295 85027172 PMID: 6092063
Origin of replication in episomal bovine *papilloma* virus type 1 DNA isolated from transformed cells.
Waldeck W; Rosl F; Zentgraf H
EMBO journal (ENGLAND) Sep 1984, 3 (9) p2173-8, ISSN 0261-4189 Journal Code: EMB
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Origin of replication in episomal bovine *papilloma* virus type 1 DNA isolated from transformed cells.
The origin of replication of bovine *papilloma* virus type 1 (BPV-1) has been determined by isolating replicative intermediates (RI) of BPV-transformed hamster embryo fibroblasts (HEF-BPV). These RI were treated ...

... at 6940 +/- 50 bp in the physical map. In a second set of experiments BPV-1 DNA fragments cloned in pBR322 were tested for transient *episomal* *replication*. Transfected cells were harvested after increasing periods of time and screened for replication with isoschizomeric restriction enzymes to differentiate between input and replicated DNA. The...

7/3,K/11 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04753714 84106844 PMID: 6319020
Characterization of the bovine *papilloma* virus plasmid maintenance sequences.
Lusky M; Botchan MR
Cell (UNITED STATES) Feb 1984, 36 (2) p391-401, ISSN 0092-8674

Journal Code: CQ4
Contract/Grant No.: CA 30490, CA, NCI
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Characterization of the bovine *papilloma* virus plasmid maintenance sequences.
Bovine *Papilloma* Virus (BPV-1) establishes itself as a multicopy nuclear plasmid in somatic mammalian cells in culture. We report here that two discontinuous regions within the viral genome can independently support *extrachromosomal* *replication* of the Tn5 neomycinr gene in cells that provide viral factors in trans. The viral plasmid maintenance sequences (PMS) act in cis and will integrate...

7/3,K/12 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11489687 BIOSIS NO.: 199800271019
Eukaryotic expression vectors that replicate to low copy number in bacteria: Transient expression of the Menkes protein.
AUTHOR: La Fontaine Sharon; Firth Stephen D; Lockhart Paul J; Paynter Jennifer A; Mercer Julian F B
AUTHOR ADDRESS: Murdoch Inst. Res. Birth Defects, Royal Children's Hospital, Parkville, VIC 3052**Australia
JOURNAL: Plasmid 39 (3):p245-251 1998
ISSN: 0147-619X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: either constitutive or inducible promoters; (3) a chimeric intron, for enhancing gene expression, is present; (4) they contain unique cloning sites; (5) they have an *SV40* polyadenylation signal, and a subset of the vectors have an *SV40* origin of replication for *episomal* *replication* and transient gene expression. A cDNA encoding the Menkes disease protein was cloned into two of these vectors, and transient expression studies in COS-7...

7/3,K/13 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11217404 BIOSIS NO.: 199799838549
Exploitation of human origins of replication (ORIs) for *extrachromosomal* *replication* of reporter genes in gene therapy.
AUTHOR: Boulikas Teni(a); Hsie Linda(a); Kong C F(a); Hu Jie(a); Brooks Dawn(a); Zannis-Hadjopoulos Maria
AUTHOR ADDRESS: (a)Inst. Molecular Med. Sci., 460 Page Mill Road, Palo Alto, CA 94306**USA
JOURNAL: International Journal of Oncology 11 (SUPPL.):p930 1997
CONFERENCE/MEETING: 2nd World Congress on Advances in Oncology Athens, Greece October 16-18, 1997
ISSN: 1019-6439
RECORD TYPE: Citation
LANGUAGE: English

Exploitation of human origins of replication (ORIs) for *extrachromosomal* *replication* of reporter genes in gene therapy.
DESCRIPTORS:
...ORGANISMS: *SV40* virus (Papovaviridae)
MISCELLANEOUS TERMS: ...*EXTRACHROMOSOMAL* *REPLICATION*;

7/3,K/14 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10989821 BIOSIS NO.: 199799610966
Safety-modified episomal vectors for human gene therapy.
AUTHOR: Cooper Mark J(a); Lippa Mara; Payne Jennifer M; Hatzivassiliou Georgia; Reifenberg Erica; Fayazi Behnaz; Perales Jose C; Morrison Laura J; Templeton Dennis; Piekarz Richard L; Tan June
AUTHOR ADDRESS: (a)Case Western Reserve Univ., Div. Hematology/Oncology, BioMedical Res. Build., 3 West, 10900 Eucl**USA
JOURNAL: Proceedings of the National Academy of Sciences of the United States of America 94 (12):p6450-6455 1997
ISSN: 0027-8424
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: gene expression, we have developed a safety modified episomal expression vector that replicates extrachromosomally in human cells. This vector system employs a simian virus 40 (*SV40*) large T antigen mutant (107/402-T) that is deficient in binding to human tumor suppressor gene products, including p53, retinoblastoma, and p107, yet retains replication competence. These *SV40*-based episomes replicate to thousands of copies by 2-4 days after gene transfer in multiple types of human cell lines, with lower activity in...
...episomes replicate extrachromosomally in vivo, tumor explants in nude mice were directly injected with liposome/DNA complexes. Using a PCR-based assay, we demonstrate that *SV40*-based episomes replicate in human cells after direct in vivo gene transfer. These data suggest that safety-modified *SV40*-based episomes will be effective for cancer gene therapy because high level expression of therapeutic genes in transient transfectants should yield enhanced tumor elimination.
DESCRIPTORS:
...ORGANISMS: *SV40* (Papovaviridae)
MISCELLANEOUS TERMS: ...*EXTRACHROMOSOMAL* *REPLICATION*;

7/3,K/15 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09745054 BIOSIS NO.: 199598199972
***SV40*-based episomal vectors for cancer gene therapy: *Extrachromosomal* *replication* and high level expression following gene transfer in vivo.**
AUTHOR: Cooper M J(a); Tan J; Lippa M; Hatzivassillou G; Morrison L J; Reifenberg E; Moore H C F
AUTHOR ADDRESS: (a)Case Western Reserve Univ., Cleveland OH 44106**USA
JOURNAL: Proceedings of the American Association for Cancer Research Annual Meeting 36 (0):p249 1995
CONFERENCE/MEETING: Eighty-sixth Annual Meeting of the American Association for Cancer Research Toronto, Ontario, Canada March 18-22, 1995
ISSN: 0197-016X
RECORD TYPE: Citation
LANGUAGE: English

***SV40*-based episomal vectors for cancer gene therapy: *Extrachromosomal* *replication* and high level expression following gene transfer in vivo.**
MISCELLANEOUS TERMS: ...*SV40* LARGE T ANTIGEN GENE

7/3,K/16 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09486989 BIOSIS NO.: 199497495359

Short Communications: The Bovine *Papilloma* Virus E1 Protein Has ATPase Activity Essential to Viral DNA Replication and Efficient Transformation in Cells.

AUTHOR: MacPherson Paul(a); Thorner Lauren; Parker Lisa M; Botchan Michael
AUTHOR ADDRESS: (a)Cancer Res. Cent., Fac. Med., Univ. Ottawa, 451 Smyth Rd., Ottawa, ON K1H 8M5**Canada
JOURNAL: Virology 204 (1):p403-408 1994
ISSN: 0042-6822
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Short Communications: The Bovine *Papilloma* Virus E1 Protein Has ATPase Activity Essential to Viral DNA Replication and Efficient Transformation in Cells.

ABSTRACT: The bovine *papilloma* virus (BPV) E1 protein essential to viral DNA replication has recently been shown to associate via direct protein-DNA interactions with the viral origin of...
...ATPase activity. Mutations placed throughout the nucleotide binding consensus element abolish the ATPase activity of E1 and render BPV genomes harboring such mutations defective for *episomal* *replication* and impaired for oncogenic transformation.

7/3,K/17 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

03338373 BIOSIS NO.: 000072066477
ORIGIN OF REPLICATION FROM XENOPUS-LAEVIS MITOCHONDRIAL DNA PROMOTES HIGH FREQUENCY TRANSFORMATION OF YEAST
AUTHOR: ZAKIAN V A
AUTHOR ADDRESS: HUTCHINSON CANCER RES. CENT., GENET. DIV., 1124 COLUMBIA ST., SEATTLE, WASH. 98104.
JOURNAL: PROC NATL ACAD SCI U S A 78 (5). 1981. 3128-3132. 1981
FULL JOURNAL NAME: Proceedings of the National Academy of Sciences of the United States of America
CODEN: PNASA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: DNA replication in eukaryotes. Foreign eukaryotic DNA implicated directly or indirectly in the initiation of DNA replication was examined for its ability to promote autonomous, *extrachromosomal* *replication* in yeast. *SV40* DNA, amplified X. laevis ribosomal DNA, X. laevis 5S ribosomal DNA, X. laevis mt[mitochondrial]DNA and 5 different members of the Alu I family...

7/3,K/18 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

03053819 BIOSIS NO.: 000070079437
HUMAN FIBROBLASTS TRANSFORMED BY THE EARLY REGION OF SV-40 DNA ANALYSIS OF FREE VIRAL DNA SEQUENCES
AUTHOR: ZOUZIAS D; JHA K K; MULDER C; BASILICO C; OZER H L
AUTHOR ADDRESS: DEP. PATHOL., N.Y. UNIV. SCH. MED., NEW YORK, N.Y. 10016, USA.
JOURNAL: VIROLOGY 104 (2). 1980. 439-453. 1980
FULL JOURNAL NAME: Virology
CODEN: VIRLA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Human fibroblastic cells (HF) were transformed with the early region of the *SV40* genome (0.15-0.73 map units) by using the DNA-calcium phosphate coprecipitation technique of F. L. Graham and A. J. Van der Eb. Transformation resulted in altered morphology and ability to grow in agarose. The *SV40*-transformed human fibroblasts (SVHF-A) have a limited life span, and reach senescence after 10-11 passages. Analysis of the low MW DNA extracted from...

...viral DNA sequences in circular supercoiled form. These circular molecules are very heterogeneous in size, and contain sequences corresponding to the early region of the *SV40* genome. Part of them may contain cellular DNA sequences as well. In situ hybridization experiments indicate that a minority of the SVHF-A cells (1-3%) are spontaneously induced to synthesize free viral DNA molecules, and their frequency is increased by mitomycin C treatment. Immunofluorescence staining for *SV40* T [tumor] antigens also indicates that the cells producing free viral DNA contain higher T-antigen levels than the rest of the population. The free viral DNA molecules derive from integrated viral sequences following replication in a minority of the cells, rather than originating from a persistent *extrachromosomal* *replication* in every cell.

7/3,K/19 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11165622 EMBASE No: 2001182238
Roles of the hinge region and the DNA binding domain of the bovine papillomavirus type 1 E2 protein in initiation of DNA replication
Allikas A.; Ord D.; Kurg R.; Kivi S.; Ustav M.
M. Ustav, Department of Microbiology/Virology, Institute of Molecular/Cell Biology, Tartu University/Estonian Biocentre, 23 Riia Street, 51010 Tartu Estonia
AUTHOR EMAIL: ustav@ebc.ee
Virus Research (VIRUS RES.) (Netherlands) 2001, 75/2 (95-106)
CODEN: VIRED ISSN: 0168-1702
PUBLISHER ITEM IDENTIFIER: S0168170201002192
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 34

The bovine papillomavirus (BPV-1) E2 protein is the regulator of *extrachromosomal* *replication* of papillomaviruses. The mutants with C-terminal truncations and in-frame internal deletions were constructed to study the role of structural domains of E2 in...
MEDICAL DESCRIPTORS:
**Papilloma* virus; *DNA replication

7/3,K/20 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

06361678 EMBASE No: 1996025315
Cis and trans requirements for stable episomal maintenance of the BPV-1 replicator
Piirsoo M.; Ustav E.; Mandel T.; Stenlund A.; Ustav M.
Department Microbiology and Virology, Institute Molecular and Cell Biology, Tartu University, 23 Riia Street,EE2400 Tartu Estonia
EMBO Journal (EMBO J.) (United Kingdom) 1996, 15/1 (1-11)
CODEN: EMJOD ISSN: 0261-4189
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...proteins E1 and E2, that are required for initiation of viral DNA

replication. We show that these viral proteins are necessary and sufficient for stable *extrachromosomal* *replication*. Using the cell line C127, we have shown that the bovine *papilloma* virus-1 (BPV-1) minimal origin of replication (MO) is absolutely necessary, but is not sufficient for stable *extrachromosomal* *replication* of viral plasmids. By deletion and insertion analysis, we identified an additional element (minichromosome maintenance element, MME) in the upstream regulatory region of BPV-1...
MEDICAL DESCRIPTORS:
animal cell; article; binding site; cho cell; controlled study; dna replication origin; dna sequence; minichromosome; nonhuman; *papilloma* virus; priority journal; structure activity relation; virus cell transformation

7/3,K/21 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

05179404 EMBASE No: 1992319638
Replication of bovine papillomavirus vectors in murine cells
Waldenstrom M.; Schenstrom K.; Sollerbrant K.; Hansson L.
Symbicom AB, Box 1451,S-90124 Umea Sweden
Gene (GENE) (Netherlands) 1992, 120/2 (175-181)
CODEN: GENED ISSN: 0378-1119
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...into cells harbouring unintegrated replicating BPV-1 genomes resulted in integration of the vector DNA, whereas replication of the resident BPV-1 genomes was unaffected. *Extrachromosomal* *replication* of such a vector was achieved when the enhancer and promoter region of the foreign gene were deleted.
MEDICAL DESCRIPTORS:
animal cell; article; mouse; nonhuman; *papilloma* virus; priority journal; southern blotting

7/3,K/22 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

03917038 EMBASE No: 1989086031
Identification of bovine papillomavirus E1 mutants with increased transforming and transcriptional activity
Schiller J.T.; Kleiner E.; Androphy E.J.; Lowry D.R.; Pfister H.
Laboratory of Cellular Oncology, National Cancer Institute, Bethesda, MD 20892 United States
Journal of Virology (J. VIROL.) (United States) 1989, 63/4 (1775-1782)
CODEN: JOVIA ISSN: 0022-538X
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...open reading frame of bovine papillomavirus type 1 (BPV) has been shown previously to encode trans-acting functions, M and R, that are involved in *extrachromosomal* *replication* of the viral genome. We have determined that several E1 mutants mapping in both the M and R regions and a single mutant of the...
MEDICAL DESCRIPTORS:
**papilloma* virus; *virus cell transformation; *virus mutant; *virus transcription

7/3,K/23 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

03356673 EMBASE No: 1987109250
Replication of the bovine papillomavirus type 1 genome; antisense transcripts prevent *episomal* *replication*
Bergman P.; Ustav M.; Moreno-Lopez J.; et al.
Department of Medical Genetics, Biomedical Center, S-751 23 Uppsala Sweden
Gene (GENE) (Netherlands) 1986, 50/1-3 (185-193)
CODEN: GENED
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Replication of the bovine papillomavirus type 1 genome; antisense transcripts prevent *episomal* *replication*
MEDICAL DESCRIPTORS:
*dna replication; **papilloma* virus; *virus cell transformation

7/3,K/24 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

02979346 EMBASE No: 1985073306
Genetic analysis of bovine papillomavirus type 1 trans-acting replication factors
Lusky M.; Botchan M.R.
Department of Molecular Biology, University of California, Berkeley, CA 94720 United States
Journal of Virology (J. VIROL.) (United States) 1985, 53/3 (955-965)
CODEN: JOVIA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

The establishment of bovine papillomavirus type I in somatic mammalian cells is mediated by *extrachromosomal* *replication* and stable maintenance of the viral genome as a multicopy nuclear plasmid. Previous studies indicated the requirement of viral gene expression for bovine papillomavirus type...

...number of the viral plasmid at high levels. Genomes with mutations in the cop and rep complementation groups, when cotransfected, rescued the wild-type phenotype, *extrachromosomal* *replication* with a high, stable copy number for both types of plasmids. Therefore, the gene products acted in trans, and the mutations were recessive to the...
MEDICAL DESCRIPTORS:
*dna replication; *gene sequence; **papilloma* virus; *virus mutation
?ds

Set	Items	Description
S1	3	(SUPERTRANSFECTION) AND ((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S2	1	RD (unique items)
S3	221	((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S4	0	S3 AND (REPLICATION (W) FACTOR)
S5	0	S3 AND ((SECOND OR THIRD) (W) VECTOR)
S6	41	S3 AND (POLYOMA OR PAPILLOMA OR SV40)
S7	24	RD (unique items)
S8	0	S7 AND (ES OR (PLURIPOTENT (W) CELL))
S9	5	S7 AND (ES OR EC OR EG)

?s (signal (w) trapping) and (library)

	481897	SIGNAL
	32304	TRAPPING
	3	SIGNAL(W)TRAPPING
	103749	LIBRARY
S10	2	(SIGNAL (W) TRAPPING) AND (LIBRARY)

?rd
...completed examining records

```
     S11        1  RD (unique items)
?t s11/3,k/all

 11/3,K/1      (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

11311728   BIOSIS NO.: 199800093060
Development of a nuclear export *signal* *trapping* method for isolating
 genes with HIV Rev activity.
AUTHOR: Zhang Ming Jie; Dayton Andrew I(a)
AUTHOR ADDRESS: (a)HFM 315, CBER/FDA, 1401 Rockville Pike, Rockville, MD
  20852-1448**USA
JOURNAL: Journal of Biomedical Science  4 (6):p289-294 Nov.-Dec., 1997
ISSN: 1021-7770
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Development of a nuclear export *signal* *trapping* method for isolating
 genes with HIV Rev activity.

ABSTRACT: We have develcped a method for nuclear export *signal* *trapping*
  (NEST) to isolate functional Rev clones from various types of libraries
  such as libraries of Rev mutants. The expression libraries are
  cotransfected into COS cells...
  METHODS & EQUIPMENT: nuclear export *signal* *trapping* method...
  MISCELLANEOUS TERMS:   expression *library*;
?ds

Set     Items   Description
S1          3   (SUPERTRANSFECTION) AND ((EXTRACHROMOSOMAL OR EPISOMAL) (W)
              REPLICATION)
S2          1   RD (unique items)
S3        221   ((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S4          0   S3 AND (REPLICATION (W) FACTOR)
S5          0   S3 AND ((SECOND OR THIRD) (W) VECTOR)
S6         41   S3 AND (POLYOMA OR PAPILLOMA OR SV40)
S7         24   RD (unique items)
S8          0   S7 AND (ES OR (PLURIPOTENT (W) CELL))
S9          5   S7 AND (ES OR EC OR EG)
S10         2   (SIGNAL (W) TRAPPING) AND (LIBRARY)
S11         1   RD (unique items)
?s (signal (w) trapping)
        481897  SIGNAL
         32304  TRAPPING
     S12        3  (SIGNAL (W) TRAPPING)
?rd
...completed examining records
     S13        2  RD (unique items)
?t s13/3,k/all

 13/3,K/1      (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

11311728   BIOSIS NO.: 199800093060
Development of a nuclear export *signal* *trapping* method for isolating
 genes with HIV Rev activity.
AUTHOR: Zhang Ming Jie; Dayton Andrew I(a)
AUTHOR ADDRESS: (a)HFM 315, CBER/FDA, 1401 Rockville Pike, Rockville, MD
  20852-1448**USA
JOURNAL: Journal of Biomedical Science  4 (6):p289-294 Nov.-Dec., 1997
ISSN: 1021-7770
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
```

LANGUAGE: English

Development of a nuclear export *signal* *trapping* method for isolating genes with HIV Rev activity.

ABSTRACT: We have developed a method for nuclear export *signal* *trapping* (NEST) to isolate functional Rev clones from various types of libraries such as libraries of Rev mutants. The expression libraries are cotransfected into COS cells...
METHODS & EQUIPMENT: nuclear export *signal* *trapping* method...

13/3,K/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

11288262 BIOSIS NO.: 199800069594
Cytokine gene hunting with novel signal peptide specific expression cloning methods: cDNA and genomic *signal* *trapping*.
AUTHOR: Peterfy Miklos; Gyuris Tibor; Takacs Laszlo
AUTHOR ADDRESS: Dep. Biomed. Sci., Amgen Inc., Thousand Oaks, CA**USA
JOURNAL: Cytokine 9 (11):p961 Nov., 1997
CONFERENCE/MEETING: Fifth Annual Conference of the International Cytokine Society Lake Tahoe, Nevada, USA November 9-13, 1997
SPONSOR: International Cytokine Society
ISSN: 1043-4666
RECORD TYPE: Citation
LANGUAGE: English

Cytokine gene hunting with novel signal peptide specific expression cloning methods: cDNA and genomic *signal* *trapping*.
METHODS & EQUIPMENT: cDNA *signal* *trapping* method (complementary DNA *signal* *trapping* method...

...genomic *signal* *trapping* method...
?ds

Set	Items	Description
S1	3	(SUPERTRANSFECTION) AND ((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S2	1	RD (unique items)
S3	221	((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S4	0	S3 AND (REPLICATION (W) FACTOR)
S5	0	S3 AND ((SECOND OR THIRD) (W) VECTOR)
S6	41	S3 AND (POLYOMA OR PAPILLOMA OR SV40)
S7	24	RD (unique items)
S8	0	S7 AND (ES OR (PLURIPOTENT (W) CELL))
S9	5	S7 AND (ES OR EC OR EG)
S10	2	(SIGNAL (W) TRAPPING) AND (LIBRARY)
S11	1	RD (unique items)
S12	3	(SIGNAL (W) TRAPPING)
S13	2	RD (unique items)

?s (screening (w) library) and (secreted or (cell (w) surface))

	414253	SCREENING
	103749	LIBRARY
	21	SCREENING(W)LIBRARY
	121203	SECRETED
	5457308	CELL
	972969	SURFACE
	207755	CELL(W)SURFACE
S14	0	(SCREENING (W) LIBRARY) AND (SECRETED OR (CELL (W) SURFACE))

?s (secreted or (cell (w) surface))

	121203	SECRETED
	5457308	CELL
	972969	SURFACE

```
          207755  CELL(W)SURFACE
     S15  322414  (SECRETED OR (CELL (W) SURFACE))
?s s15 and (screening)
          322414  S15
          414253  SCREENING
     S16    3237  S15 AND (SCREENING)
?s s16 and (library or libraries)
            3237  S16
          103749  LIBRARY
           26636  LIBRARIES
     S17     944  S16 AND (LIBRARY OR LIBRARIES)
?s s17 and (morphological or proliferative)
             944  S17
          282615  MORPHOLOGICAL
          133341  PROLIFERATIVE
     S18      21  S17 AND (MORPHOLOGICAL OR PROLIFERATIVE)
?s s18 and  ES or EG or EC
              21  S18
           18217  ES
           16250  EG
         2498992  EC
     S19       6  S18 AND (ES OR EG OR EC)
?rd
...completed examining records
     S20       6  RD (unique items)
?t s18/3,k/all

 18/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11383442   21311485   PMID: 11418297
 Immunocytochemical detection of leukocyte-associated and
apoptosis-related antigen expression in childhood brain tumors.
  Bodey B; Bodey B; Siegel SE; Kaiser HE
  Department of Pathology, University of Southern California, 8000-1 Canby
Avenue, Reseda, Los Angeles, CA, USA
  Critical reviews in oncology/hematology (Ireland) Aug 2001, 39 (1-2)
 p3-16, ISSN 1040-8428 Journal Code: AGO
  Languages: ENGLISH
  Document type: Journal Article
  Record type: In Process

  During systematic *cell*-*surface* antigen expression profile analyses of
76 primary childhood brain tumors [34 medulloblastomas (MED)/primitive
neuroectodermal tumors (PNETs) and 42 astrocytomas (ASTR)], a *library* of
monoclonal antibodies (MoABs) directed against various
leukocyte-associated, lymphocyte cell-line differentiation antigens in
childhood brain tumors was utilized. The antigens were detected employing
...

... do not. FasR is a transmembrane glycoprotein which belongs to the nerve
growth factor/tumor necrosis factor (NGF/TNF) receptor superfamily. As part
of our *screening* , the 42 childhood ASTRs were also investigated for
expression of CD95. We detected strong expression (strong intensity of
staining, number of stained cells 50-100...

... melanomas have been shown to produce their autocrine FasL, and are even
capable of switching CD95-related signal transduction from the PCD pathway
to a *proliferative* pathway. In view of our results, we conclude that: 1)
the tumor infiltrating leukocytes in MEDs/PNETs and ASTRs represent a very
diverse population and...


 18/3,K/2     (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
```

10466630 20079166 PMID: 10610727

Cloning of a novel epidermal growth factor repeat containing gene EGFL6: expressed in tumor and fetal tissues.

Yeung G; Mulero JJ; Bernstsen RP; Loeb DB; Drmanac R; Ford JE

Functional Genomics Department, Immunology Group, Hyseq Inc., Sunnyvale, California 94086, USA.

Genomics (UNITED STATES) Dec 1 1999, 62 (2) p304-7, ISSN 0888-7543 Journal Code: GEN

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

The epidermal growth factor (EGF) repeat superfamily of genes often encodes proteins that govern cellular *proliferative* responses. Using a high-throughput *screening* by hybridization approach, a novel human EGF repeat superfamily member that maps to human chromosome X was identified. Termed EGFL6, the gene encodes a predicted signal peptide, suggesting that it is *secreted* . Other predicted features include four and one-half EGF-like repeat domains, two N-linked glycosylation sites, an integrin association motif (RGD), and a tyrosine...

; Adult; Amino Acid Sequence; Base Sequence; Cloning, Molecular; Fetus; Gene *Library*; Glycoproteins--isolation and purification--IP; Middle Age; Molecular Sequence Data; Multigene Family; Neoplasm Proteins--isolation and purification--IP; Nucleic Acid Hybridization; Organ Specificity--genetics --GE

18/3,K/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

10165587 99270956 PMID: 10338503

Molecular characterization and human T-cell responses to a member of a novel Mycobacterium tuberculosis mtb39 gene family.

Dillon DC; Alderson MR; Day CH; Lewinsohn DM; Coler R; Bement T; Campos-Neto A; Skeiky YA; Orme IM; Roberts A; Steen S; Dalemans W; Badaro R ; Reed SG

Corixa Corporation, Seattle, Washington 98104, USA. dillon@corixa.com

Infection and immunity (UNITED STATES) Jun 1999, 67 (6) p2941-50, ISSN 0019-9567 Journal Code: GO7

Contract/Grant No.: AI-75320, AI, NIAID

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

We have used expression *screening* of a genomic Mycobacterium tuberculosis *library* with tuberculosis (TB) patient sera to identify novel genes that may be used diagnostically or in the development of a TB vaccine. Using this strategy...

... tested. Immunoblot analysis demonstrated the presence of Mtb39A in M. tuberculosis lysate but not in culture filtrate proteins CFP-, indicating that it is not a *secreted* antigen. This conclusion is strengthened by the observation that a human T-cell clone specific for purified recombinant Mtb39A protein recognized autologous dendritic cells infected with TB or pulsed with purified protein derivative (PPD) but did not respond to M. tuberculosis CFP. Purified recombinant Mtb39A elicited strong T-cell *proliferative* and gamma interferon responses in peripheral blood mononuclear cells from 9 of 12 PPD-positive individuals tested, and overlapping peptides were used to identify a...

18/3,K/4 (Item 4 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

09260694 97160620 PMID: 9006954

Characterization of a secretory type Theileria parva glutaredoxin

homologue identified by novel *screening* procedure.
Ebel T; Middleton JF; Frisch A; Lipp J
Vienna International Research Cooperation Center, University of Vienna, A-1235 Vienna, Austria.
Journal of biological chemistry (UNITED STATES) Jan 31 1997, 272 5 p3042-8, ISSN 0021-9258 Journal Code: HIV
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Characterization of a secretory type Theileria parva glutaredoxin homologue identified by novel *screening* procedure.
... features characteristic of tumor cells in infected bovine T-cell lines. Most strikingly T. parva-infected cell lines acquire unlimited growth potential in vitro. Their *proliferative* state is entirely dependent on the presence of a viable parasite within the host cell cytoplasm. It has been postulated that parasite proteins either *secreted* into the host cell or expressed on the parasite surface membrane are involved in the parasite-host cell interaction. We used an in vitro transcription...
; Amino Acid Sequence; Antigens, Protozoan--analysis--AN; Antigens, Protozoan--biosynthesis--BI; Cattle; Cell Line; Cell Transformation, Neoplastic; Cloning, Molecular; Consensus Sequence; Gene *Library*; Intracellular Membranes--metabolism--ME; Membrane Proteins--chemistry--CH; Microsomes--metabolism--ME; Molecular Sequence Data; Molecular Weight; Oxidoreductases--chemistry--CH; Recombinant Proteins--biosynthesis--BI; Recombinant Proteins...

18/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09049356 96346639 PMID: 8738161
Up-regulation of cystatin C by microglia in the rat facial nucleus following axotomy.
Miyake T; Gahara Y; Nakayama M; Yamada H; Uwabe K; Kitamura T
Shionogi Institute for Medical Science, Shionogi Research Laboratories, Osaka, Japan.
Brain research. Molecular brain research (NETHERLANDS) Apr 1996, 37 (1-2) p273-82, ISSN 0169-328X Journal Code: MBR
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

... whether its expression is regulated under pathological conditions of the CNS and what types of cells are responsible for this regulation. We performed differential hybridization *screening* of cDNA *libraries* derived from the rat facial nucleus and found a cDNA of rat cystatin C to be up-regulated following facial nerve axotomy. In situ hybridization...

... level by day 50. The intense signal for cystatin C mRNA in the damaged facial nucleus was localized in the glial cells which had the *morphological* characteristics of microglia. Light and electron microscopic immunohistochemistry using a rabbit antibody specific for cystatin C confirmed that microglia in the damaged facial nucleus were...

... cystatin C generally secrete this protein. These results demonstrate that cystatin C is markedly up-regulated by microglia in response to axotomy and is probably *secreted* by these cells into the extracellular space, suggesting that this proteinase inhibitor has (a) significant function(s) in the processes of neuronal degeneration, regeneration, and...

18/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08913987 96227615 PMID: 8674869

Differential gene regulation by estrogen and progesterone in the primate endometrium.

Ace CI; Okulicz WC

Department of Obstetrics and Gynecology, University of Massachusetts Medical School, Worcester 01655, USA.

Molecular and cellular endocrinology (IRELAND) Nov 30 1995, 115 1 p95-103, ISSN 0303-7207 Journal Code: E89

Contract/Grant No.: HD-31620, HD, NICHD

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

During the shift from a *proliferative* to a secretory endometrium in the rhesus menstrual cycle, progesterone action causes massive metabolic and structural remodelling. In order to identify genes whose expression is...

... adaptors and amplified by PCR using an adaptor-complementary primer. This procedure resulted in the production of E- and PcDNA template populations for cDNA-specific *screening* and comparative quantitation by PCR. Initial analysis showed that placental protein 14 (PP14) was P-dependent and human complement 3 (HC3) was up-regulated in...

... PcDNA. Among these factors, PP14, LIF, IGF-1-R TGFB-2 and 17-B-HSD were also detectable in PCR in a P-dependent cDNA *library* isolated by subtractive hybridization. These data provide evidence for hormonal regulation of specific gene products that may play important roles in the normal maturation of...

...; Cycle--genetics--GE; Menstrual Cycle--metabolism--ME; Molecular Sequence Data; Polymerase Chain Reaction; Progesterone--pharmacology--PD; RNA, Messenger--genetics--GE; RNA, Messenger--metabolism--ME; Receptors, *Cell* *Surface*--drug effects--DE; Receptors, *Cell* *Surface*--genetics --GE; Receptors, *Cell* *Surface*--metabolism--ME; Receptors, Estrogen --drug effects--DE; Receptors, Estrogen--genetics--GE; Receptors, Estrogen--metabolism--ME; Receptors, Progesterone--drug effects--DE; Receptors, Progesterone--genetics--GE; Receptors...

Chemical Name: DNA Primers; DNA, Complementary; Hormones; RNA, Messenger; Receptors, *Cell* *Surface*; Receptors, Estrogen; Receptors, Progesterone; Transforming Growth Factor beta; Estradiol; Progesterone; Epidermal Growth Factor; Insulin-Like Growth Factor I

18/3,K/7 (Item 7 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07918940 93356765 PMID: 8352761

Sequence and functional characterization of feline interleukin 2.

Cozzi PJ; Padrid PA; Takeda J; Alegre ML; Yuhki N; Leff AR

Department of Medicine, University of Chicago, IL.

Biochemical and biophysical research communications (UNITED STATES) Aug 16 1993, 194 (3) p1038-43, ISSN 0006-291X Journal Code: 9Y8

Contract/Grant No.: NHLBI HL-08653, HL, NHLBI; NHLBI HL-32495, HL, NHLBI; NHLBI HL-46368, HL, NHLBI; +

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

...well as synthesize bioactive recombinant feline IL-2. The isolation of cDNA encoding feline IL-2 was carried out using a PCR-based strategy and *screening* of a feline leukocyte cDNA *library*. Feline IL-2 consists of 154 amino acids including a putative signal sequence and has 61%, 69%, 69% and 64% identity to human, bovine, murine and rat IL-2, respectively. Feline IL-2 cDNA was expressed in COS-7 cells. The *secreted* protein has CTLL-4 murine cytotoxic T cell *proliferative* activity characteristic of authentic IL-2. These data confirm the synthesis of bioactive recombinant feline IL-2.

18/3,K/8 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07577767 92184774 PMID: 1544909
Expression of porcine complement cytolysis inhibitor mRNA in cultured aortic smooth muscle cells. Changes during differentiation in vitro.
Diemer V; Hoyle M; Baglioni C; Millis AJ
Department of Biological Sciences, University at Albany, State University of New York 12222.
Journal of biological chemistry (UNITED STATES) Mar 15 1992, 267 (8) p5257-64, ISSN 0021-9258 Journal Code: HIV
Contract/Grant No.: CA29895, CA, NCI; HL40417, HL, NHLBI
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Porcine smooth muscle cells (SMC) grown to a high density monolayer culture undergo a *morphological* transition in which the cells draw away from the substrate and form multicellular nodules. The cells within the nodule resemble SMC in the aortic media and in some atherosclerotic plaques. The process of nodule formation is associated with the enhanced production of a *secreted* 38-kDa glycoprotein. To characterize the 38-kDa protein and its expression, a cDNA clone (pc38K was isolated by immunological *screening* of an expression *library*. The 1646-base pair cDNA contains a single open reading frame encoding 446 amino acids. This sequence shows 72% homology with the human complement cytolysis...

18/3,K/9 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07540018 92168251 PMID: 1665209
Cloning and direct sequencing from lambda cDNA *libraries* using the polymerase chain reaction: suppressin and the vasopressin receptor as models.
LeBoeuf RD; Green MM; Berecek KH; Swords BH; Blalock JE
Department of Physiology and Biophysics, University of Alabama, Birmingham 35294-0005.
Netherlands journal of medicine (NETHERLANDS) Oct 1991, 39 (3-4) p295-305, ISSN 0300-2977 Journal Code: NWY
Contract/Grant No.: DK-38024, DK, NIDDK; HL-28545, HL, NHLBI
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Cloning and direct sequencing from lambda cDNA *libraries* using the polymerase chain reaction: suppressin and the vasopressin receptor as models.
A strategy using the polymerase chain reaction (PCR) to screen a lambda gt11 pituitary cDNA *library* for cDNAs encoding suppressin, a putative anti-*proliferative* protein, and a putative vasopressin receptor is described. The use of this technique will facilitate the demonstration of e.g. the presence of "neuropeptide receptors...

... receptors" by the neuroendocrine and the immune system. Neither of the genes encoding the proteins of the present study have previously been cloned. The PCR-*screening* procedure requires sequence information from the gene of interest which permits the generation of complementary primers. These primers are then used in combination with lambda phage primers complementary to regions flanking the cloning site in a PCR to amplify cDNAs derived from the gene of interest. This novel *screening* procedure yields cDNA related to the gene of interest, including the largest clone present in the *library*. To confirm the utility of this technique for cDNA *libraries*, the *library* was also screened using traditional cDNA

hybridization techniques. The largest clone obtained by *screening* the cDNA *library* with PCR was the same as that obtained by the conventional technique. Thus, the results of these studies show that the PCR method can be used instead of more conventional means to screen cDNA *libraries*. Lastly, we describe a protocol for directly sequencing PCR-amplified DNA using the same primers that are used for amplification. The combined use of these two strategies permits cloning and sequencing of cDNAs from lambda cDNA *libraries* in a fraction of the time required using traditional *screening* techniques, but with identical results.

Descriptors: DNA--analysis--AN; *DNA, Recombinant; *Gene *Library*; *Immunosuppressive Agents; *Models, Genetic; *Polymerase Chain Reaction --methods--MT; *Receptors, *Cell* *Surface*--genetics--GE; *Thymus Hormones --genetics--GE; *Vasopressins

Chemical Name: DNA, Recombinant; Immunosuppressive Agents; Receptors, *Cell* *Surface*; Thymus Hormones; Vasopressins; suppressin; DNA

18/3,K/10 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07027053 93136115 PMID: 8422334
Osteopontin overexpression is associated with arterial smooth muscle cell proliferation in vitro.
Gadeau AP; Campan M; Millet D; Candresse T; Desgranges C
INSERM U8, Pessac, France.
Arteriosclerosis and thrombosis (UNITED STATES) Jan 1993, 13 (1) p120-5, ISSN 1049-8834 Journal Code: AZ1
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

... genes involved in the cell cycle G1 phase progression of arterial smooth muscle cells (SMCs), a cDNA clone (M11) was previously selected by differential hybridization *screening* of a mid-G1 serum-stimulated SMC cDNA *library*. The delay of induction after mitogenic stimulation, time of expression, and need for new protein synthesis for full expression made it possible to classify this gene in the "delayed early" gene group. Determination of the partial M11 cDNA sequence showed full homology with the osteopontin gene (*secreted* phosphoprotein 1, 2ar), an Arg-Gly-Asp-containing extracellular matrix protein. Osteopontin mRNA was also detected in the aorta at levels as high as in...
... of our results, the high osteopontin expression observed by others in the injured carotid artery could be explained by the involvement of SMCs in the *proliferative* process. Taken together, these results suggest that osteopontin may play an important role in pathological processes that are associated with arterial SMC proliferation, such as...

18/3,K/11 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12047048 BIOSIS NO.: 199900327567
Molecular characterization and human T-Cell responses to a member of a novel Mycobacterium tuberculosis mtb39 gene family.
AUTHOR: Dillon Davin C(a); Alderson Mark R; Day Craig H; Lewinsohn David M; Coler Rhea; Bement Teresa; Campos-Neto Antonio; Skeiky Y A W; Orme Ian M; Roberts Alan; Steen Sean; Dalemans Wilfried; Badaro Roberto; Reed Steven G
AUTHOR ADDRESS: (a)Corixa Corporation, 1124 Columbia St., Suite 200, Seattle, WA, 98104**USA
JOURNAL: Infection and Immunity 67 (6):p2941-2950 June, 1999
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: We have used expression *screening* of a genomic Mycobacterium tuberculosis *library* with tuberculosis (TB) patient sera to identify novel genes that may be used diagnostically or in the development of a TB vaccine. Using this strategy...
...tested. Immunoblot analysis demonstrated the presence of Mtb39A in M. tuberculosis lysate but not in culture filtrate proteins (CFP), indicating that it is not a *secreted* antigen. This conclusion is strengthened by the observation that a human T-cell clone specific for purified recombinant Mtb39A protein recognized autologous dendritic cells infected with TB or pulsed with purified protein derivative (PPD) but did not respond to M. tuberculosis CFP. Purified recombinant Mtb39A elicited strong T-cell *proliferative* and gamma interferon responses in peripheral blood mononuclear cells from 9 of 12 PPD-positive individuals tested, and overlapping peptides were used to identify a...

18/3,K/12 (Item 2 from file: 5)
DIALOG(R File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

10388968 BIOSIS NO.: 199699010113
Up-regulation of cystatin C by microglia in the rat facial nucleus following axotomy.
AUTHOR: Miyake Toshihiko(a); Gahara Yoshinari; Nakayama Manabu; Yamada Hajime; Uwabe Ken-Ichiro; Kitamura Tadahisa
AUTHOR ADDRESS: (a)Shionogi Inst. Med. Sci., Shionogi Res Lab., 5-12-4 Sagisu, Fukushima-ku, Osaka 553**Japan
JOURNAL: Molecular Brain Research 37 (1-2):p273-282 1996
ISSN: 0169-328X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: whether its expression is regulated under pathological conditions of the CNS and what types of cells are responsible for this regulation. We performed differential hybridization *screening* of cDNA *libraries* derived from the rat facial nucleus and found a cDNA of rat cystatin C to be up-regulated following facial nerve axotomy. In situ hybridization...

...level by day 50. The intense signal for cystatin C mRNA in the damaged facial nucleus was localized in the glial cells which had the *morphological* characteristics of microglia. Light and electron microscopic immunohistochemistry using a rabbit antibody specific for cystatin C confirmed that microglia in the damaged facial nucleus were...

...cystatin C generally secrete this protein. These results demonstrate that cystatin C is markedly up-regulated by microglia in response to axotomy and is probably *secreted* by these cells into the extracellular space, suggesting that this proteinase inhibitor has (a) significant function(s) in the processes of neuronal degeneration, regeneration, and ...

18/3,K/13 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

08962268 BIOSIS NO.: 199396113769
Sequence and functional characterization of feline interleukin 2.
AUTHOR: Cozzi Phillip J(a); Padrid Philip A(a); Takeda Jun; Alegre Marie-Luisa; Yuhki Naoya; Leff Alan R(a)
AUTHOR ADDRESS: (a)Dep. Med., Univ. Chicago, 5841 S. Maryland Ave., Chicago, IL 60637**USA

JOURNAL: Biochemical and Biophysical Research Communications 194 3 :p
1038-1043 1993
ISSN: 0006-291X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: well as synthesize bioactive recombinant feline IL-2. The isolation of cDNA encoding feline IL-2 was carried out using a PCR-based strategy and *screening* of a feline leukocyte cDNA *library*. Feline IL-2 consists of 154 amino acids including a putative signal sequence and has 81%, 69%, 60% and 64% identity to human, bovine, murine and rat IL-2, respectively. Feline IL-2 cDNA was expressed in COS-7 cells. The *secreted* protein has CTLL-4 murine cytotoxic T cell *proliferative* activity characteristic of authentic IL-2. These data confirm the synthesis of bioactive recombinant feline IL-2.

18/3,K/14 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

08781077 BIOSIS NO.: 199395070428
Osteopontin overexpression is associated with arterial smooth muscle cell proliferation in vitro.
AUTHOR: Gadeau Alain-Pierre; Campan Michel; Millet Dominique; Candresse Thierry; Desgranges Claude
AUTHOR ADDRESS: INSEM U8, av. du Haut-Leveque, 33600 Pessac**France
JOURNAL: Arteriosclerosis and Thrombosis 13 (1):p120-125 1993
ISSN: 1049-8834
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: involved in the cell cycle G-1 phase progression of arterial smooth muscle cells (SMCs), a cDNA clone (M11) was previously selected by differential hybridization *screening* of a mid-G-1 serum-stimulated SMC cDNA *library*. The delay of induction after mitogenic stimulation, time of expression, and need for new protein synthesis for full expression made it possible to classify this gene in the "delayed early" gene group. Determination of the partial M11 cDNA sequence showed full homology with the osteopontin gene (*secreted* phosphoprotein 1, 2ar), an Arg-Gly-Asp-containing extracellular matrix protein. Osteopontin mRNA was also detected in the aorta at levels as high as in....

...of our results, the high osteopontin expression observed by others in the injured carotid artery could be explained by the involvement of SMCs in the *proliferative* process. Taken together, these results suggest that osteopontin may play an important role in pathological processes that are associated with arterial SMC proliferation, such as...

18/3,K/15 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

08133097 BIOSIS NO.: 000093120245
EXPRESSION OF PORCINE COMPLEMENT CYTOLYSIS INHIBITOR MRNA IN CULTURED AORTIC SMOOTH MUSCLE CELLS CHANGES DURING DIFFERENTIATION IN-VITRO
AUTHOR: DIEMER V; HOYLE M; BAGLIONI C; MILLIS A J T
AUTHOR ADDRESS: CENTER CELLULAR DIFFERENTIATION, DEP. BIOL. SCI., UNIV. ALBANY, ALBANY, N.Y. 12222.
JOURNAL: J BIOL CHEM 267 (8). 1992. 5257-5264. 1992
FULL JOURNAL NAME: Journal of Biological Chemistry
CODEN: JBCHA
RECORD TYPE: Abstract

LANGUAGE: ENGLISH

ABSTRACT: Porcine smooth muscle cells (SMC) grown to a high density monolayer culture undergo a *morphological* transition in which the cells draw away from the substrate and form multicellular nodules. The cells within the nodule resemble SMC in the aortic media and in some atherosclerotic plaques. The process of nodule formation is associated with the enhanced production of a *secreted* 38-kDa glycoprotein. To characterize the 38-kDa protein and its expression, a cDNA clone (pc38K was isolated by immunological *screening* of an expression *library*. The 1646-base pair cDNA contains a single open reading frame encoding 446 amino acids. This sequence shows 72% homology with the human complement cytolysis...

18/3,K/16 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11202584 EMBASE No: 2001217250
Immunocytochemical detection of leukocyte-associated and apoptosis-related antigen expression in childhood brain tumors
Bodey B.; Bodey B. Jr.; Siegel S.E.; Kaiser H.E.
B. Bodey, Department of Pathology, University of Southern California, 8000-1 Canby Avenue, Reseda, Los Angeles, CA United States
AUTHOR EMAIL: bodey18@aol.com
Critical Reviews in Oncology/Hematology (CRIT. REV. ONCOL. HEMATOL.) (Ireland) 2001, 39/1-2 (3-16)
CODEN: CCRHE ISSN: 1040-8428
PUBLISHER ITEM IDENTIFIER: S1040842801001196
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 196

During systematic *cell*-*surface* antigen expression profile analyses of 76 primary childhood brain tumors [34 medulloblastomas (MED)/primitive neuroectodermal tumors (PNETs) and 42 astrocytomas (ASTR)], a *library* of monoclonal antibodies (MoABs) directed against various leukocyte-associated, lymphocyte cell-line differentiation antigens in childhood brain tumors was utilized. The antigens were detected employing ...

...do not. FasR is a transmembrane glycoprotein which belongs to the nerve growth factor/tumor necrosis factor (NGF/TNF) receptor superfamily. As part of our *screening*, the 42 childhood ASTRs were also investigated for expression of CD95. We detected strong expression (strong intensity of staining, number of stained cells 50-100...

...melanomas have been shown to produce their autocrine FasL, and are even capable of switching CD95-related signal transduction from the PCD pathway to a *proliferative* pathway. In view of our results, we conclude that: (1) the tumor infiltrating leukocytes in MEDs/PNETs and ASTRs represent a very diverse population and...
MEDICAL DESCRIPTORS:
...tumor--etiology--et; astrocytoma--etiology--et; technique; immunoreactivity; lymphocyte differentiation; cell line; cytotoxic T lymphocyte; helper cell; macrophage; granulocyte; promyelocyte; cell maturation; natural killer cell; *screening*; immune response; human; controlled study; human tissue; conference paper

18/3,K/17 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

07705115 EMBASE No: 1999185642

Molecular characterization and human T-cell responses to a member of a novel Mycobacterium tuberculosis mtb39 gene family

Dillon D.C.; Alderson M.R.; Day C.H.; Lewinsohn D.M.; Coler R.; Bement T.; Campos-Neto A.; Skeiky Y.A.W.; Orme I.M.; Roberts A.; Steen S.; Dalemans W.; Badaro R.; Reed S.G.

D.C. Dillon, Corixa Corporation, 1124 Columbia St., Seattle, WA 98104 United States

AUTHOR EMAIL: dillon@corixa.com

Infection and Immunity (INFECT. IMMUN.) (United States) 1999, 67/6 (2941-2950)

CODEN: INFIB ISSN: 0019-9567

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 44

We have used expression *screening* of a genomic Mycobacterium tuberculosis *library* with tuberculosis (TB) patient sera to identify novel genes that may be used diagnostically or in the development of a TB vaccine. Using this strategy...

...tested. Immunoblot analysis demonstrated the presence of Mtb39A in M. tuberculosis lysate but not in culture filtrate proteins (CFP), indicating that it is not a *secreted* antigen. This conclusion is strengthened by the observation that a human T-cell clone specific for purified recombinant Mtb39A protein recognized autologous dendritic cells infected with TB or pulsed with purified protein derivative (PPD) but did not respond to M. tuberculosis CFP. Purified recombinant Mtb39A elicited strong T-cell *proliferative* and gamma interferon responses in peripheral blood mononuclear cells from 9 of 12 PPD-positive individuals tested, and overlapping peptides were used to identify a...

18/3,K/18 (Item 3 from file: 73)

06488529 EMBASE No: 1996154560

Up-regulation of cystatin C by microglia in the rat facial nucleus following axotomy

Miyake T.; Gahara Y.; Nakayama M.; Yamada H.; Uwabe K.-I.; Kitamura T.

Shionogi Institute Medical Science, Shionogi Research Laboratories, 5-12-4 Sagisu,Fukushima-ku, Osaka 553 Japan

Molecular Brain Research (MOL. BRAIN RES.) (Netherlands) 1996, 37/1-2 (273-282)

CODEN: MBREE ISSN: 0169-328X

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...whether its expression is regulated under pathological conditions of the CNS and what types of cells are responsible for this regulation. We performed differential hybridization *screening* of cDNA *libraries* derived from the rat facial nucleus and found a cDNA of rat cystatin C to be up-regulated following facial nerve axotomy. In situ hybridization...

...level by day 56. The intense signal for cystatin C mRNA in the damaged facial nucleus was localized in the glial cells which had the *morphological* characteristics of microglia. Light and electron microscopic immunohistochemistry using a rabbit antibody specific for cystatin C confirmed that microglia in the damaged facial nucleus were...

...cystatin C generally secrete this protein. These results demonstrate that cystatin C is markedly up-regulated by microglia in response to axotomy and is probably *secreted* by these cells into the extracellular space, suggesting that this proteinase inhibitor has (a) significant function(s) in the processes of neuronal degeneration, regeneration, and...

MEDICAL DESCRIPTORS:

animal experiment; animal tissue; article; dna *library*; electron

microscopy; extracellular space; glia cell; immunohistochemistry; in situ hybridization; male; microscopy; nonhuman; priority journal; protein secretion; rat; rna probe; tissue distribution

18/3,K/19 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

05486899 EMBASE No: 1993254998
Sequence and functional characterization of feline interleukin 2
Cozzi P.J.; Padrid P.A.; Takeda J.; Alegre M.-L.; Yuhki N.; Leff A.R.
Department of Medicine, The University of Chicago, 5841 S. Maryland Ave.,Chicago, IL United States
Biochemical and Biophysical Research Communications (BIOCHEM. BIOPHYS. RES. COMMUN.) (United States) 1993, 194/3 (1038-1043)
CODEN: BBRCA ISSN: 0006-291X
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...well as synthesize bioactive recombinant feline IL-2. The isolation of cDNA encoding feline IL-2 was carried out using a PCR-based strategy and *screening* of a feline leukocyte cDNA *library*. Feline IL-2 consists of 154 amino acids including a putative signal sequence and has 81%, 69%, 60% and 64% identity to human, bovine, murine and rat IL-2, respectively. Feline IL-2 cDNA was expressed in COS-7 cells. The *secreted* protein has CTLL-4 murine cytotoxic T cell *proliferative* activity chracteristic of authentic IL-2. These data confirm the synthesis of bioactive recombinant feline IL-2.

18/3,K/20 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

05253507 EMBASE No: 1993021592
Osteopontin overexpression is associated with arterial smooth muscle cell proliferation in vitro
Gadeau A.-P.; Campan M.; Millet D.; Candresse T.; Desgranges C.
INSERM U8, av. du Haut-Leveque,33600 Pessac France
Arteriosclerosis and Thrombosis (ARTERIOSCLER. THROMB.) (United States) 1993, 13/1 (120-125)
CODEN: ARTTE ISSN: 1049-8834
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...involved in the cell cycle Ginf 1 phase progression of arterial smooth muscle cells (SMCs), a cDNA clone (M11) was previously selected by differential hybridization *screening* of a mid-Ginf 1 serum- stimulated SMC cDNA *library*. The delay of induction after mitogenic stimulation, time of expression, and need for new protein synthesis for full expression made it possible to classify this gene in the 'delayed early' gene group. Determination of the partial M11 cDNA sequence showed full homology with the osteopontin gene (*secreted* phosphoprotein 1, 2ar), an Arg-Gly-Asp-containing extracellular matrix protein. Osteopontin mRNA was also detected in the aorta at levels as high as in...
...of our results, the high osteopontin expression observed by others in the injured carotid artery could be explained by the involvement of SMCs in the *proliferative* process. Taken together, these results suggest that osteopontin may play an important role in pathological processes that are associated with arterial SMC proliferation, such as...

18/3,K/21 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

05166429 EMBASE No: 1992306662

Expression of porcine complement cytolysis inhibitor mRNA in cultured aortic smooth muscle cells. Changes during differentiation in vitro

Diemer V.; Hoyle M.; Baglioni C.; Millis A.J.T.
Dept. of Biological Sciences, Center for Cellular Differentiation, State University of New York,Albany, NY 12222 United States
Journal of Biological Chemistry (J. BIOL. CHEM.) United States 1992, 267/8 (5257-5264)
CODEN: JBCHA ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Porcine smooth muscle cells (SMC) grown to a high density monolayer culture undergo a *morphological* transition in which the cells draw away from the substrate and form multicellular nodules. The cells within the nodule resemble SMC in the aortic media and in some atherosclerotic plaques. The process of nodule formation is associated with the enhanced production of a *secreted* 38-kDa glycoprotein. To characterize the 38-kDa protein and its expression, a cDNA clone (pc38K) was isolated by immunological *screening* of an expression *library*. The 1646-base pair cDNA contains a single open reading frame encoding 446 amino acids. This sequence shows 72% homology with the human complement cytolysis...

MEDICAL DESCRIPTORS:
animal cell; article; atherosclerotic plaque; cell differentiation; controlled study; dna *library*; nonhuman; northern blotting; open reading frame; priority journal; protein glycosylation; protein synthesis; rna rna hybridization; sequence homology; southern blotting; swine; tissue distribution

?ds

Set	Items	Description
S1	3	(SUPERTRANSFECTION) AND ((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S2	1	RD (unique items)
S3	221	((EXTRACHROMOSOMAL OR EPISOMAL) (W) REPLICATION)
S4	0	S3 AND (REPLICATION (W) FACTOR)
S5	0	S3 AND ((SECOND OR THIRD) (W) VECTOR)
S6	41	S3 AND (POLYOMA OR PAPILLOMA OR SV40)
S7	24	RD (unique items)
S8	0	S7 AND (ES OR (PLURIPOTENT (W) CELL))
S9	5	S7 AND (ES OR EC OR EG)
S10	2	(SIGNAL (W) TRAPPING) AND (LIBRARY)
S11	1	RD (unique items)
S12	3	(SIGNAL (W) TRAPPING)
S13	2	RD (unique items)
S14	0	(SCREENING (W) LIBRARY) AND (SECRETED OR (CELL (W) SURFACE-))
S15	322414	(SECRETED OR (CELL (W) SURFACE))
S16	3237	S15 AND (SCREENING)
S17	944	S16 AND (LIBRARY OR LIBRARIES)
S18	21	S17 AND (MORPHOLOGICAL OR PROLIFERATIVE)
S19	6	S18 AND (ES OR EG OR EC)
S20	6	RD (unique items)

?logoff

25aug01 12:44:36 User259876 Session D255.2
$3.41 1.066 DialUnits File155
$5.20 26 Type(s) in Format 3
$5.20 26 Types
$8.61 Estimated cost File155
$5.15 0.920 DialUnits File5
$24.75 15 Type(s) in Format 3
$24.75 15 Types
$29.90 Estimated cost File5
$24.05 2.830 DialUnits File73
$30.55 13 Type(s) in Format 3

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        $30.55  13 Types
$54.60  Estimated cost File73
        OneSearch, 3 files,  4.815 DialUnits FileOS
 $1.25  TYMNET
$94.36  Estimated cost this search
$94.64  Estimated total session cost   4.893 DialUnits


### Status: Signed Off. (25 minutes)
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### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106900061...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
### Status: Signing onto Dialog
 ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
### Status: Connected


Dialog level 00.12.12D

Last logoff:  24dec00 15:39:15
Logon file001 24dec00 15:49:20
KWIC is set to 50.
HILIGHT set on as '*'
***                                    ***

File   1:ERIC  1966-2000/Dec 05
       (c) format only 2000 The Dialog Corporation

      Set  Items  Description
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?b 155, 5, 73
       24dec00 15:49:30 User259876 Session D167.1
            $0.41    0.116 DialUnits File1
     $0.41  Estimated cost File1
     $0.01  TYMNET
     $0.42  Estimated cost this search
     $0.42  Estimated total session cost   0.116 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2000/Dec W4
        (c) format only 2000 Dialog Corporation
*File 155: For information on updating, changes to the file, and
check tags information please see Help News155.
  File   5:Biosis Previews(R)  1969-2000/Dec W4
        (c) 2000 BIOSIS
  File  73:EMBASE  1974-2000/Nov W4
        (c) 2000 Elsevier Science B.V.
*File  73: Update codes are currently undergoing readjustment.
For details type Help News73.

      Set  Items  Description
      ---  -----  -----------
?s (replication (w) factor) and (extrachromosomal (w) replication)
         209037  REPLICATION
        1555920  FACTOR
            863  REPLICATION(W)FACTOR
           7854  EXTRACHROMOSOMAL
         209037  REPLICATION
            126  EXTRACHROMOSOMAL(W)REPLICATION
      S1      0  (REPLICATION (W) FACTOR) AND (EXTRACHROMOSOMAL (W)
                 REPLICATION)
?s (extrachromosomal (w) replication)
           7854  EXTRACHROMOSOMAL
         209037  REPLICATION
      S2   126  (EXTRACHROMOSOMAL (W) REPLICATION)
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?s s2 or (episomal (w) replication)
             126  S2
            2819  EPISOMAL
          209037  REPLICATION
              83  EPISOMAL(W)REPLICATION
      S3     206  S2 OR (EPISOMAL (W) REPLICATION)
?s s3 and (supertransfection (w) system)
             206  S3
              36  SUPERTRANSFECTION
         5428644  SYSTEM
               0  SUPERTRANSFECTION(W)SYSTEM
      S4       0  S3 AND (SUPERTRANSFECTION (W) SYSTEM)
?s s3 and (supertransfection)
             206  S3
              36  SUPERTRANSFECTION
      S5       3  S3 AND (SUPERTRANSFECTION)
?rd
...completed examining records
      S6       1  RD (unique items)
?t s6/3,k/all

 6/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.

07247607   93013032
 Replication of bovine papillomavirus vectors in murine cells.
  Waldenstrom M; Schenstrom K; Sollerbrant K; Hansson L
  KabiGen, Kabi Pharmacia AB, Stockholm, Sweden.
  Gene (NETHERLANDS)   Oct 21 1992,  120 (2) p175-81,  ISSN 0378-1119
Journal Code: FOP
  Languages: ENGLISH
  Document type: JOURNAL ARTICLE

  ... expression vectors. This result was obtained with clones isolated by
co-transfection followed by neomycin selection, as well as with clones
isolated from neoplastic foci. *Supertransfection* of a BPV-1-based
expression vector into cells harbouring unintegrated replicating BPV-1
genomes resulted in integration of the vector DNA, whereas replication of
the resident BPV-1 genomes was unaffected. *Extrachromosomal* *replication*
of such a vector was achieved when the enhancer and promoter region of the
foreign gene were deleted.
?ds

Set     Items   Description
S1          0   (REPLICATION (W) FACTOR) AND (EXTRACHROMOSOMAL (W) REPLICA-
              TION)
S2        126   (EXTRACHROMOSOMAL (W) REPLICATION)
S3        206   S2 OR (EPISOMAL (W) REPLICATION)
S4          0   S3 AND (SUPERTRANSFECTION (W) SYSTEM)
S5          3   S3 AND (SUPERTRANSFECTION)
S6          1   RD (unique items)
?s s3 and ((second or third) (w) (vector?))
             206  S3
          785655  SECOND
          387467  THIRD
          219153  VECTOR?
             200  (SECOND OR THIRD)(W)VECTOR?
      S7       0  S3 AND ((SECOND OR THIRD) (W) (VECTOR?))
?s s3 and (mulitple (w) vector?)
             206  S3
             168  MULITPLE
          219153  VECTOR?
               0  MULITPLE(W)VECTOR?
      S8       0  S3 AND (MULITPLE (W) VECTOR?)
?s s3 and (ES or EC or EG)
```

```
            206  S3
          26478  ES
        2046784  EC
          15023  EG
     S9      32  S3 AND (ES OR EC OR EG)
?rd
...completed examining records
     S10      30  RD (unique items)
?s s10 and ((polyoma (w) large (w) T (w) antigen) or (EBNA-1 (w) antigen) or (SV40 (w)
large (w) T (w) antigen) or (papilloma (w) virus (w) replication (w) factor?))
Processing
             30  S10
           8454  POLYOMA
        1088186  LARGE
        3602559  T
         837851  ANTIGEN
             68  POLYOMA(W)LARGE(W)T(W)ANTIGEN
             35  EBNA-1
         837851  ANTIGEN
              0  EBNA-1(W)ANTIGEN
          25003  SV40
        1088186  LARGE
        3602559  T
         837851  ANTIGEN
           2912  SV40(W)LARGE(W)T(W)ANTIGEN
          25679  PAPILLOMA
        1011892  VIRUS
         209037  REPLICATION
        3336684  FACTOR?
              0  PAPILLOMA(W)VIRUS(W)REPLICATION(W)FACTOR?
     S11      1  S10 AND ((POLYOMA (W) LARGE (W) T (W) ANTIGEN) OR (EBNA-1
                 (W) ANTIGEN) OR (SV40 (W) LARGE (W) T (W) ANTIGEN) OR
                 (PAPILLOMA (W) VIRUS (W) REPLICATION (W) FACTOR?))
?t s11/3,k/all
```


11/3,K/1 (Item 1 from file: 73)

06224894 EMBASE No: 1995261719

Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: Effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region

Kobayashi M.; Yamauchi Y.; Yamaguchi K.; Tanaka A.
Morinaga Milk Branch, Res Inst Innovative Technology Earth, Morinaga Milk Ind Co, Ltd, Higashihara 5-1-83,Zama, Kanagawa 228 Japan

Antisense Research and Development (ANTISENSE RES. DEV.) (United States) 1995, 5/2 (141-148)
CODEN: AREDE ISSN: 1050-5261
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: Effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region

We have developed a transient expression assay for selection of effective antisense RNAs using *episomal* *replication* of plasmids in COS-7 cells, an African green monkey kidney-derived cell line expressing *SV40* *large* *T* *antigen*. The transient expression assay was enabled by a liposome-mediated DNA transfection method, by which about 70% of the cells were reproducibly transfected with exogenous...

DRUG DESCRIPTORS:
gene product; messenger rna--endogenous compound--*ec*; virus large t antigen

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?ds
```

```
Set     Items   Description
S1          0   (REPLICATION (W) FACTOR) AND (EXTRACHROMOSOMAL (W) REPLICA-
              TION)
S2        126   (EXTRACHROMOSOMAL (W) REPLICATION)
S3        206   S2 OR (EPISOMAL (W) REPLICATION)
S4          0   S3 AND (SUPERTRANSFECTION (W) SYSTEM)
S5          3   S3 AND (SUPERTRANSFECTION)
S6          1   RD (unique items)
S7          0   S3 AND ((SECOND OR THIRD) (W) (VECTOR?))
S8          0   S3 AND (MULITPLE (W) VECTOR?)
S9         32   S3 AND (ES OR EC OR EG)
S10        30   RD (unique items)
S11         1   S10 AND ((POLYOMA (W) LARGE (W) T (W) ANTIGEN) OR (EBNA-1 -
              (W) ANTIGEN) OR (SV40 (W) LARGE (W) T (W) ANTIGEN) OR (PAPILL-
              OMA (W) VIRUS (W) REPLICATION (W) FACTOR?))
?s s3 and (replication (w) factor?)
             206  S3
          209037  REPLICATION
         3336684  FACTOR?
            1165  REPLICATION(W)FACTOR?
     S12       3  S3 AND (REPLICATION (W) FACTOR?)
?rd
...completed examining records
     S13       1  RD (unique items)
?t s13/3,k/all

 13/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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GR 355.J65

```
06013210   85135044
   Genetic analysis of bovine papillomavirus type 1 trans-acting
*replication* *factors*.
  Lusky M; Botchan MR
  Journal of virology (UNITED STATES) Mar 1985, 53 (3) p955-65, ISSN
0022-538X  Journal Code: KCV
  Contract/Grant No.: CA 30490, CA, NCI
  Languages: ENGLISH
  Document type: JOURNAL ARTICLE

   Genetic analysis of bovine papillomavirus type 1 trans-acting
*replication* *factors*.
  The establishment of bovine papillomavirus type 1 in somatic mammalian
cells is mediated by *extrachromosomal* *replication* and stable
maintenance of the viral genome as a multicopy nuclear plasmid. Previous
studies indicated the requirement of viral gene expression for bovine
papillomavirus type...

... assayed the resulting mutants for their ability to replicate
extrachromosomally in mouse C127 cells. We report here that the bovine
papillomavirus type 1 trans-acting *replication* *factors* were encoded by
at least two distinct viral genes since the mutants fell into two
complementation groups, rep and cop. Mutants (rep-) affecting the E1...

... number of the viral plasmid at high levels. Genomes with mutations in
the cop and rep complementation groups, when cotransfected, rescued the
wild-type phenotype, *extrachromosomal* *replication* with a high, stable
copy number for both types of plasmids. Therefore, the gene products acted
in trans, and the mutations were recessive to the...
?ds

Set     Items   Description
S1          0   (REPLICATION (W) FACTOR) AND (EXTRACHROMOSOMAL (W) REPLICA-
              TION)
S2        126   (EXTRACHROMOSOMAL (W) REPLICATION)
```

```
S3        206   S2 OR (EPISOMAL (W) REPLICATION)
S4          0   S3 AND (SUPERTRANSFECTION (W) SYSTEM)
S5          3   S3 AND (SUPERTRANSFECTION)
S6          1   RD (unique items)
S7          0   S3 AND ((SECOND OR THIRD) (W) (VECTOR?))
S8          0   S3 AND (MULITPLE (W) VECTOR?)
S9         32   S3 AND (ES OR EC OR EG)
S10        30   RD (unique items)
S11         1   S10 AND ((POLYOMA (W) LARGE (W) T (W) ANTIGEN) OR (EBNA-1 -
              (W) ANTIGEN) OR (SV40 (W) LARGE (W) T (W) ANTIGEN) OR (PAPILL-
              OMA (W) VIRUS (W) REPLICATION (W) FACTOR?))
S12         3   S3 AND (REPLICATION (W) FACTOR?)
S13         1   RD (unique items)
?s s3 and (recombinase?)
            206  S3
           4647  RECOMBINASE?
     S14     0   S3 AND (RECOMBINASE?)
?s s3 and (vector?)
            206  S3
         219153  VECTOR?
     S15    94   S3 AND (VECTOR?)
?s s15 and (recombinase?)
             94  S15
           4647  RECOMBINASE?
     S16     0   S15 AND (RECOMBINASE?)
?rd s15
...examined 50 records  (50)
...completed examining records
     S17    43   RD S15 (unique items)
?s s17 and (ori)
             43  S17
           2305  ORI
     S18     4   S17 AND (ORI)
?t s18/3,k/all
```

RC 261 A1157

18/3,K/1 (Item 1 from file: 155)

10370285 20225774

Suppression of the tumorigenic growth of Burkitt's lymphoma cells in immunodeficient mice by cytokine gene transfer using EBV-derived episomal expression *vectors*.

Mucke S; Draube A; Polack A; Pawlita M; Massoudi N; Staratschek-Jox A; Bohlen H; Bornkamm G; Diehl V; Wolf J

University of Cologne, Department of Internal Medicine I, Cologne, Germany.

International journal of cancer. Journal international du cancer (UNITED STATES) May 1 2000, 86 (3) p301-6, ISSN 0020-7136 Journal Code: GQU

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Suppression of the tumorigenic growth of Burkitt's lymphoma cells in immunodeficient mice by cytokine gene transfer using EBV-derived episomal expression *vectors*.

Epstein-Barr virus (EBV)-based expression *vectors* were tested for cytokine gene transfer-mediated induction of an immune response against human lymphoma cells. These *vectors* express the EBV latent gene EBNA 1 and carry the EBV latent origin of replication (*ori* P) for *episomal* *replication* in transfected cells. In addition, 3 human immunoglobulin light chain enhancer elements augment expression in B-cells. The suitability of these *vectors* for expression of cytokine genes in human lymphoma cells in vitro has been demonstrated. In order to extend these experiments in vivo, highly tumorigenic Burkitt's lymphoma (BL) cells were transfected with different cytokine genes of human and murine origin cloned into the EBNA 1/*ori* P *vectors*. Tumorigenicity of the transfectants was

measured after inoculation into nude mice. No effect on tumorigenicity was observed after hIL 6 transfection and an inconsistent effect...

... cells. Thus, highly tumorigenic BL cells in nude mice are sensitive to immune effector mechanisms triggered by cytokine expression. In this experimental model, EBNA 1/*ori* P expression *vectors* are a suitable tool for cytokine gene transfer mediated induction of an anti-lymphoma immune response of the host. Copyright 2000 Wiley-Liss, Inc.

Descriptors: Burkitt Lymphoma--Genetics--GE; *Burkitt Lymphoma --Prevention and Control--PC; *Cytokines--Genetics--GE; *Gene Therapy; *Gene Transfer; *Genetic *Vectors*; *Herpesvirus 4, Human

Chemical Name: Cytokines; (Genetic *Vectors*; (Plasmids

18/3,K/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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08423431 96078382

Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region.

Kobayashi M; Yamauchi Y; Yamaguchi K; Tanaka A

Morinaga Milk Branch, Research Institute of Innovative Technology for the Earth, Kanagawa, Japan.

Antisense research and development (UNITED STATES) Summer 1995, 5 (2) p141-8, ISSN 1050-5261 Journal Code: B17

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Transient expression assay for antisense RNAs using *episomal* *replication* of plasmids: effective reduction of retinoblastoma gene (Rb-1) product by its antisense RNA complementary to 3'-untranslated region.

We have developed a transient expression assay for selection of effective antisense RNAs using *episomal* *replication* of plasmids in COS-7 cells, an African green monkey kidney-derived cell line expressing SV40 large T antigen. The transient expression assay was enabled...

... about 70% of the cells were reproducibly transfected with exogenous DNAs. Plasmids expressing antisense RNAs for the retinoblastoma gene (Rb-1) mRNA and harboring SV40 *ori* were constructed and introduced into COS-7 cells to examine their inhibitory effect on the accumulation of endogenous Rb protein (pRb). Only the antisense RNA...

... pRb 70 h after transfection. A similar inhibition was detected in mouse mammary carcinoma cells (FM3A) that were stably transfected with the antisense RNA expressing *vector* directed to 3'UTR. In contrast, no obvious change in pRb was observed with antisense RNAs complementary to the coding region of Rb-1 mRNA...

Descriptors: DNA Replication; *Genetic *Vectors*; *Plasmids--Genetics--GE ; *Retinoblastoma Protein--Genetics--GE; *RNA, Antisense--Genetics--GE; *Translation, Genetic

Chemical Name: Genetic *Vectors*; (Plasmids; (Retinoblastoma Protein; (RNA, Antisense

18/3,K/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

06557128 91172903

Identification of the origin of replication of the eukaryote Dictyostelium discoideum nuclear plasmid Ddp2.

Chang AC; Slade MB; Williams KL

School of Biological Sciences, Macquarie University, Sydney, New South

Wales, Australia.
Plasmid (UNITED STATES) Nov 1990, 24 (3) p208-17, ISSN 0147-619X
Journal Code: P8P
Languages: ENGLISH
Document type: JOURNAL ARTICLE

...Dictyostelium discoideum. We have identified two functional domains, a large open reading frame (Rep gene) and a 626-bp fragment containing an origin of replication (*ori*). The *ori*, when cloned into a shuttle *vector*, confers stable *extrachromosomal* *replication* in D. discoideum, provided that the Rep gene, which acts in trans, is integrated into the host genome. Ddp2 carries a 501-bp imperfect inverted repeat, and part of the *ori* overlaps with one of these repeats. The *ori* sequence contains two direct repeats of 49 bp comprising two 10-bp "TGTCATGACA" palindromes separated by a poly(T.A) sequence. Deletion of either 49-bp repeat abolished *extrachromosomal* *replication*.
; Base Sequence; Chromosomes, Fungal; Cloning, Molecular; DNA, Fungal --Genetics--GE; DNA, Fungal--Isolation and Purification--IP; Genetic *Vectors*; Molecular Sequence Data; Open Reading Frames; Restriction Mapping; Transformation, Genetic

18/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.

06041050 86301878
An inducible eukaryotic host-*vector* expression system: amplification of genes under the control of the polyoma late promoter in a cell line producing a thermolabile large T antigen.
Kern FG; Basilico C
Gene (NETHERLANDS) 1986, 43 (3) p237-45, ISSN 0378-1119
Journal Code: FOP
Contract/Grant No.: CA11893, CA, NCI; 5T32 CA09161, CA, NCI
Languages: ENGLISH
Document type: JOURNAL ARTICLE

An inducible eukaryotic host-*vector* expression system: amplification of genes under the control of the polyoma late promoter in a cell line producing a thermolabile large T antigen.
... the inherent instability of integrated polyoma (Py) DNA sequences in the presence of a functional viral large T antigen (LT) to develop a eukaryotic host-*vector* system where copy number is controlled by temperature. A mouse cell line WOP32-4, that constitutively expresses a temperature sensitive (ts) LT, was transfected with plasmids containing the Py origin of DNA replication (*ori*) and either a neomycin-resistance gene (neo) or chloramphenicol acetyl transferase gene (cat) linked to the Py late promoter. Stable transformants were selected at 39...

... the ts LT function. Upon shift to 33 degrees C, the resident Py sequences present in the WOP32-4 cells cannot excise due to an *ori* deletion. However, excision of the transfected plasmid molecules and subsequent *extrachromosomal* *replication* occur at high rates leading in some cases to the production of 1000-2000 copies per cell (average) of the plasmid. Proportional increases in either...
Descriptors: Antigens, Viral, Tumor--Genetics--GE; *Genetic *Vectors*; *Polyomavirus--Genetics--GE; *Promoter Regions (Genetics)
?ds

Set	Items	Description
S1	0	(REPLICATION (W) FACTOR) AND (EXTRACHROMOSOMAL (W) REPLICATION)
S2	126	(EXTRACHROMOSOMAL (W) REPLICATION)
S3	206	S2 OR (EPISOMAL (W) REPLICATION)
S4	0	S3 AND (SUPERTRANSFECTION (W) SYSTEM)
S5	3	S3 AND (SUPERTRANSFECTION)

```
S6          1   RD (unique items)
S7          0   S3 AND ((SECOND OR THIRD) (W) (VECTOR?))
S8          0   S3 AND (MULITPLE (W) VECTOR?)
S9         32   S3 AND (ES OR EC OR EG)
S10        30   RD (unique items)
S11         1   S10 AND ((POLYOMA (W) LARGE (W) T (W) ANTIGEN) OR (EBNA-1 -
              (W) ANTIGEN) OR (SV40 (W) LARGE (W) T (W) ANTIGEN) OR (PAPILL-
              OMA (W) VIRUS (W) REPLICATION (W) FACTOR?))
S12         3   S3 AND (REPLICATION (W) FACTOR?)
S13         1   RD (unique items)
S14         0   S3 AND (RECOMBINASE?)
S15        94   S3 AND (VECTOR?)
S16         0   S15 AND (RECOMBINASE?)
S17        43   RD S15 (unique items)
S18         4   S17 AND (ORI)
?s s17 and (cDNA (w) (libraries or library))
            43  S17
        210971  CDNA
         23896  LIBRARIES
         96672  LIBRARY
         34597  CDNA(W)(LIBRARIES OR LIBRARY)
     S19     3  S17 AND (CDNA (W) (LIBRARIES OR LIBRARY))
?t s19/3,k/all
```

19/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

GH462

08550075 96069583

A system utilizing Epstein-Barr virus-based expression *vectors* for the functional cloning of human fibroblast growth regulators.

Carstens CP; Gallo JC; Maher VM; McCormick JJ; Fahl WE

McArdle Laboratory for Cancer Research, University of Wisconsin Medical School, Madison 53706, USA.

Gene (NETHERLANDS) Oct 27 1995, 164 (2) p195-202, ISSN 0378-1119 Journal Code: FOP

Contract/Grant No.: CA42024, CA, NCI; P30-CA07175, CA, NCI; CA60907, CA, NCI; +

Languages: ENGLISH

Document type: JOURNAL ARTICLE

A system utilizing Epstein-Barr virus-based expression *vectors* for the functional cloning of human fibroblast growth regulators.

... by expression of libraries of cDNA inserts either in the sense or antisense direction. The system is comprised of two components: (i) the library expression *vectors* , CMV-EL and C1E-EL, containing EBoriP for replication in EBN A-1-expressing cells, an expression cassette with a multiple cloning site suitable for directional insertion of *cDNA* *libraries* generated by standard protocols, and loxP sites which allow rapid manipulation of recovered *vectors* without the use of restriction enzymes and (ii) the EBNA-1-producing cell line, BB-5, a derivative of the immortalized, non-tumorigenic and anchorage...

... fibroblast cell line, MSU1.1. The growth characteristics of BB-5 cells did not differ from its parental cell line. BB-5 cells supported the *episomal* *replication* of CMV-EL and C1E-EL and allowed recovery of the *vector* from Hirt lysates of transfected BB-5 cells. BB-5 cells transformed to anchorage-independent growth by transfection with a mutant c-Ha-ras gene...

Descriptors: Cloning, Molecular--Methods--MT; *Fibroblast Growth Factor --Biosynthesis--BI; *Genetic *Vectors*; *Herpesvirus 4, Human; *Recombinant Proteins--Biosynthesis--BI

Chemical Name: Antigens, Viral; (DNA-Binding Proteins; (Epstein-Barr Virus Nuclear Antigens; (Genetic *Vectors*; (Oligodeoxyribonucleotides; (Recombinant Proteins; (Fibroblast Growth Factor

19/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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GR 184 I55

07285966 92307747
A new approach to the cloning of genes encoding T-cell epitopes.
Scott DM; Dyson PJ; Simpson E
Transplantation Biology Section, Clinical Research Centre, Harrow, Middlesex, UK.
Immunogenetics (UNITED STATES) 1992, 36 (2) p86-94, ISSN 0093-7711 Journal Code: GI4
Languages: ENGLISH
Document type: JOURNAL ARTICLE

... the integrated DNA by cosmid rescue. We have modified this technique and have stably transfected P1.HTR cell lines with polyoma T antigen, which allows *episomal* *replication* of the shuttle *vector*, pCDM8. Using pCDM8-CAT constructs, we have determined the frequency of transfection and plasmid copies taken up per cell under optimal transfection conditions. Using a...

... be amplified in bacteria, transfected back into P1.HTR recipients, and recognized by the T-cell clone. This approach should enable reasonably rapid screening of *cDNA* *libraries* for even relatively low abundance messages encoding, for example, minor histocompatibility and alloantigens, and allow their subsequent cloning.
; Antigens, Polyomavirus Transforming--Physiology--PH; DNA Replication; Epitopes; Gene Library; Genetic *Vectors*; Lymphocyte Transformation; Mice; Mice, Inbred DBA; Plasmids; Transfection

19/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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QH 506 M6

06077702 88302203
Epstein-Barr virus shuttle *vector* for stable *episomal* *replication* of cDNA expression libraries in human cells.
Margolskee RF; Kavathas P; Berg P
Department of Biochemistry, Stanford University School of Medicine, California 94305.
Molecular and cellular biology (UNITED STATES) Jul 1988, 8 (7) p2837-47, ISSN 0270-7306 Journal Code: NGY
Contract/Grant No.: GM-13235, GM, NIGMS
Languages: ENGLISH
Document type: JOURNAL ARTICLE

Epstein-Barr virus shuttle *vector* for stable *episomal* *replication* of cDNA expression libraries in human cells.
Efficient transfection and expression of *cDNA* *libraries* in human cells has been achieved with an Epstein-Barr virus-based subcloning *vector* (EBO-pcD). The plasmid *vector* contains a resistance marker for hygromycin B to permit selection for transformed cells. The Epstein-Barr virus origin for plasmid replication (oriP) and the Epstein-Barr virus nuclear antigen gene have also been incorporated into the *vector* to ensure that the plasmids are maintained stably and extrachromosomally. Human lymphoblastoid cells can be stably transformed at high efficiency (10 to 15%) by such...

...two to eight copies per cell, intact cDNA clones can be readily isolated from transformants and recovered by propagation in Escherichia coli. By using such *vectors* , human cells have been stably transformed with EBO-pcD-hprt to express hypoxanthine-guanine phosphoribosyltransferase and with EBO-pcD-Leu-2 to express the human...
Descriptors: DNA Replication; *Gene Expression Regulation; *Genetic